

# Instructional Days Amendment Request

## Charterholder Info

### Charter Holder

**Name:**  
Kestrel Schools, Incorporated

**CTDS:**  
13-87-59-000

**Mailing Address:**  
P.O. Box 11028  
Prescott, AZ 86304  
> [View detailed info](#)

### Representative

**Name:**  
Steven Durand

**Phone Number:**  
480-621-3365

## Downloads

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## Contractual Days

144

**To**  
184, 189

**Fiscal Year Effective Date**  
2013-2014

**Type of Change**  
Permanent Change

## Attachment

Board Minutes –  [Download File](#)

School Calendar –  [Download File](#)

Daily Instructional Schedule –  [Download File](#)

Narrative –  [Download File](#)

**Additional Information\***  
No documents were uploaded.

## Signature

**Charter Representative Signature**  
Steven Durand 02/19/2014

**Kestrel Schools, Inc.**  
**Minutes of the Governing Board Meeting**  
**Tuesday August 7, 2013 6:00pm**  
Kestrel High School Conference Room  
325 N. Washington Ave.  
Prescott, Arizona 86301

The Kestrel Schools, Inc. Governing Board convened a board meeting Tuesday August 7, 2013, at 6:00pm in the Kestrel High School Conference Room at 325 N. Washington Ave., Prescott, Arizona 86301.

Item A: Call to Order

Mr. Durand called the meeting to order at 6:04 p.m.

Item B: Welcome and Introductions

Board Members Present: Shannon Munoz (Present), Steve Durand (phone), and Gayle Samuels (Present)

Attendees: Jennifer Womack, Jeff Sawner (Phone)

Item C: Approval of Agenda

1. Mr. Durand made a motion to approve the agenda as written. Shannon Munoz seconded the motion. Motion passed unanimously.

Item D. Current Events Summary

1. Governing Board – S Durand  
Review of student behavior and the impact of Kestrel's reputation on enrollment. Mr. Durand commented the student behavior is positive. The members discussed the impact of past reputation on current enrollment. The current enrollment is at 39 and needs to be at 53. Mr. Durand commented on the new staff and their positive impact on the students. Shannon Munoz asked about mailers. Mr. Durand said that we are in the progress of getting a postal code for mailers.
2. Mr. Durand discussed Tim Walkenbachs position as the Special Education teacher and his progress with students and records.
3. Mr. Durand informed members on Jeanette Carey's resignation, her last day was July 13, 2013.
4. Mr. Durand commented that all bills are paid except the full balance on the lawyer fee and credit card, which are being paid off.

Item E: Study and Voting Session

1. The board reviewed changing the school's calendar from a 4 day week to a 5 day week. It was discussed that this change will increase the number of hours of instruction available to students. Mr. Durand motioned to approve, Shannon Munoz seconded the motion. Motion passed unanimously.

Item F: Consider approving minutes for the meeting on June 28, 2013 – voting

1. Consider approving the minutes from the July 09, 2013 Governing Board Meeting. Mr. Durand made a motion approve the meeting minutes, Shannon Munoz seconded. Motion passed unanimously.

Item G: Call to Public

None represented

Item H: Set next meeting and adjournment

1. Mr. Durand made a motion to adjourn at 6:42 p.m. Mrs. Samuels seconded the motion and it passed unanimously. The next meeting was scheduled for Tuesday September 10, 2013 at 6:00 pm.

GOVERNING BOARD  
Kestrel High School  
By: Jennifer Womack

## Narrative

The change from a 4 day week to a 5 day week will increase the number of instructional days to a minimum of 184 school days; providing students with a significant increase in instructional time with their teachers. We feel that providing the students with more classroom instructional time will have a positive effect on academic growth and progress.

The calendar has two tracks, both have a minimum of 184 days.

Track 1: 8/5/13 – 5/30/14 has 189 days.

Track 2: 8/12/13 – 5/30/14 has 184 days

# Charter Mission Amendment Request

## Charterholder Info

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### Representative

**Name:**  
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480-621-3365

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## Mission

### Change From

Our mission is to provide quality educational opportunities by recognizing individual student needs. In a safe and supportive environment, we encourage self-empowerment by teaching the intellectual and social skills necessary to meet the challenges in our society. We, at Kestrel High School, believe that: 1. all students will be prepared for the rigors of adulthood. 2. self-esteem is important and will be fostered in our school. 3. students will become aware and explore career opportunities for the future. 4. students will become technologically proficient. 5. all students are expected to master state adopted academic standards. 6. mental and physical awareness is focused on and encouraged. 7. student communication skills will be enhanced. 8. critical and independent thinking skills will be fostered. 9. environmental literacy will be increased in our students. 10. creativity is the backbone of our school community. 11. a safe learning environment is critical to any student learning. 12. students will engage in a partnership with their community.

### Change To

Our Mission is to provide quality educational opportunities by recognizing individual student needs, in a safe and supportive environment. We encourage self-empowerment by teaching the intellectual and social skills necessary to meet the challenges in our society. We will support an alternative school population that needs to recover credits in order to graduate on time.

## Attachments

Board Minutes —  [Download File](#)

### Additional Information\*

No documents were uploaded.

## Signatures

Charter Representative Signature  
Steven Durand 02/04/2014

**Kestrel Schools, Inc.**  
**Minutes of the Governing Board Meeting**  
**January 8, 2014, 5:30 pm**  
Kestrel High School Conference Room  
325 N Washington Ave.  
Prescott, Arizona 86301

The Kestrel School, Inc., Governing Board convened a board meeting Wednesday January 8, 2014 at 5:30 pm in the Kestrel High School Conference room at 325 N. Washington Ave., Prescott, AZ 86301

Item A. Call to Order

Mr. Durand called the meeting to order at 5:41 p.m.

Item B. Welcome and Introductions –

Board members present: Gayle Samuels (present), Steve Durand (phone), Shannon Munoz (present).

Members of the public attendees: Jennifer Womack, William Sawner

Item C. Approval of Agenda

1. Consider approving the agenda as presented – Mr. Durand made a motion to approve the agenda as written, Shannon Munoz seconded, motion passed.

Item D. Current Events Summary

1. Governing Board –

Mr. Durand notified members that Kestrel's student AIMS scores were excellent and the fiscal house is in order. Mr. Durand notified members that the student count is holding strong at forty students.

Item E. Study and Voting Session

1. Approve the updated mission statement. Mr. Durand made a motion to approve the updated mission statement, Gayle Samuels seconded, motion approved.

The approved KHS mission:

*"Our Mission is to provide quality educational opportunities by recognizing individual student needs, in a safe and supportive environment. We encourage self-empowerment by teaching the intellectual and social skills necessary to meet the challenges in our society. We will support an alternative school population that needs to recover credits in order to graduate on time."*

2. Approve the minutes from the November 14, 2013 Governing Board Meeting. Mr. Durand made a motion to approve minutes from the November 14, 2013 board meeting, Gayle Samuels Seconded, motion approved.

Item F. Call to public-None

Item G. Set Next Meeting and Adjournment

1. Mr. Durand made a motion to adjourn at 5:48 pm and set the next meeting for February 6, 2014 at 5:30pm. Gayle Samuels seconded, motion passed.

GOVERNING BOARD

Kestrel High School

The board shall transact business as authorized by ARS 38.431.4; "Meeting" means the gathering, in person or through technological devices, of a quorum of members of a public body at which they discuss, propose or take legal action, including any deliberations by a quorum with respect to such action." Pursuant to A.R.S. § 38-431.03(A)(3) the Board may vote to go into Executive Session, which will not be open to the public.

# Program of Instruction Amendment Request

## Charterholder Info

### Charter Holder

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**CTDS:**  
13-87-59-000

**Mailing Address:**  
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### Representative

**Name:**  
Steven Durand

**Phone Number:**  
480-621-3365

## Downloads

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## Description of changes

### Change From:

Kestrel Schools, Inc./Kestrel High School had a program of instruction that was based on a tradition model serving all students utilizing an exploratory learning environment.

### Change To:

Kestrel Schools, Inc./Kestrel High School will utilize a teacher directed computerized content delivery system (CDS) and blended learning instructional program to meet the needs of the predominantly alternative student population served.

## Attachments

Board Minutes —  [Download File](#)

Narrative that describes 1) the change, to include rationale and background and 2) how the program of instruction change will support the educational philosophy and target population served. —  [Download File](#)

Performance Management Plan Narrative —  [Download File](#)

### Additional Information\*

No documents were uploaded.

## Signature

Charter Representative Signature  
Steven Durand 03/17/2014

**Kestrel Schools, Inc.**  
**Minutes of the Governing BOARD MEETING**  
**March 15, 2014, 1:00 pm**  
Kestrel High School Conference Room  
325 N Washington Ave.  
Prescott, Arizona 86301

The Kestrel School, Inc., Governing Board conveyed a board meeting Saturday, March 15th, at 1:00 pm in the Kestrel High School Conference room at 325 N. Washington Ave., Prescott, AZ 86301

Item A. Call to Order- Mr. Durand called the meeting to order at 1:01 pm.

Item B. Welcome and Introductions –

Board Members Present: Steve Durand (phone) Shannon Munoz (phone) Gayle Samuels (phone) William Nielson (phone)  
Members of the Public in Attendance: Jennifer Womack, William Sawner (phone)

Item C. Approval of Agenda

1. Consider approving the agenda as presented – Mr. Durand made a motion to approve the agenda as presented, Ms. Munoz seconded, motion passed.

Item D. Current Events Summary

Governing Board – Mr. Durand informed the board that the school is doing well and preparations for the Math AIMS test are in progress.

Item E. Study and Voting Session

1. Review and consider approving a change in the program of instruction for Kestrel High School to better serve an alternative student population. If approved the school intends to serve students in one or more of the following categories that reflect an alternative school.
  - a. Students who have a documented history of disruptive behavior issues.
  - b. Students who have dropped out of school and are now returning.
  - c. Students in poor academic standing as demonstrated by being at least one year behind on grade level performance or academic credits.
  - d. Students who are primary caregivers or are financially responsible for dependents and, therefore, may require a flexible school schedule.
  - e. Students who are adjudicated.
  - f. Students who are wards of the state and are in need of an alternative school setting.
  - g. Students choosing to attend a blended learning environment.

Mr. Durand motioned that the board approve changing the Program of Instruction for Kestrel High School to better align the schools mission statement as an alternative school that serves students in the following categories:

- a. Students who have a documented history of disruptive behavior issues.
- b. Students who have dropped out of school and are now returning.
- c. Students in poor academic standing as demonstrated by being at least one year behind on grade level performance or academic credits.
- d. Students who are primary caregivers or are financially responsible for dependents and, therefore, may require a flexible school schedule.
- e. Students who are adjudicated.
- f. Students who are wards of the state and are in need of an alternative school setting.
- g. Students choosing to attend a blended learning environment.

Mr. Nielson seconded, motion passed.

Item F. Call to public-No public comments

Item G. Adjournment- Mr. Durand made a motion to adjourn at 1:10 pm.

GOVERNING BOARD  
Kestrel High School

The board shall transact business as authorized by ARS 38.431.4; "Meeting" means the gathering, in person or through technological devices, of a quorum of members of a public body at which they discuss, propose or take legal action, including any deliberations by a quorum with respect to such action." Pursuant to A.R.S. § 38-431.03(A)(3) the Board may vote to go into Executive Session, which will not be open to the public.

Amendment Request Narrative Responses

Below are brief responses to the prompts presented in the Program of Instruction Amendment Request. Please refer to Kestrel School, Inc. /Kestrel High School's updated Program of Instruction document for a full description of how these items are addressed.

**1. Describe the proposed changes to the program of instruction to include, curricula, methods of instruction, and methods of assessment.**

*Please refer to the Updated Program of Instruction document for full description.*

Kestrel School, Inc. /Kestrel High School will utilize a computerized content delivery system (CDS) and blended learning instructional program to meet the needs of the predominantly alternative student population served.

Teachers providing direct instruction can use the same content as the computerized delivery system, allowing a seamless blended learning approach. Small group instruction and individualized assistance are also part of the blended learning instructional model.

Kestrel School, Inc. /Kestrel High School's computerized content delivery system (CDS) instructional program is formulated and delivered with a methodology that supports Response to Intervention (RTI). In order to accelerate learning for all students, the CDS will practice RTI by developing a framework for making instructional decisions based on data collected from the CDS formative and summative assessment tools. Formative assessments that provide immediate and ongoing teacher feedback are provided in each course. The CDS provides monitoring and assessment tools in the form of audit and item audit reports. These tools provide real-time assessment of student progress, participation, and performance fostering a proactive approach to each student's learning.

**2. What is the rationale for the change in the program of instruction?**

Kestrel School, Inc. /Kestrel High School has evolved to better meet the needs of the students who are seeking enrollment, thus, the need to update the Program of Instruction. The typical student who enrolls at Kestrel School, Inc. /Kestrel High School has attended and withdrawn from at least one other school, is one year or more behind in the number of credits earned toward graduation, and has literacy and/or numeracy levels below their cohort grade level. Kestrel School, Inc. /Kestrel High School students generally have at least two additional significant barriers to completing their high school education, such as family history of dropping out, working full-time to provide income to family, pregnant or parenting status, substance use, gang involvement, involvement with the juvenile justice system (including wards of the state or adjudication), disruptive behavior, or other external issues.

For many students, Kestrel School, Inc. /Kestrel High School serves as a Credit Recovery Alternative School, specifically designed to serve over-age, under-credited students who have dropped out of high school and who, by definition, cannot graduate within the standard number of years. The blended

learning approach allows students to access the content 24/7 providing increased learning time as needed to recover credits for graduation.

**3. How will the proposed changes to the program of instruction align to the mission and educational philosophy documented in the charter?**

The mission statement already addresses the focus on meeting the needs of an alternative school population.

**4. How do the proposed changes to the program of instruction improve pupil achievement in the target population served?**

<b>Target Population being served at Kestrel School, Inc. /Kestrel High School</b>	<b>Benefit of Kestrel School, Inc. /Kestrel High School Blended Learning Instruction</b>
<input checked="" type="checkbox"/> Students who have a documented history of disruptive behavior issues.	<ul style="list-style-type: none"> <li>- Blended learning allows for an individualized approach to limit potential disruptive interactions.</li> <li>- Blended learning provides needed support and coursework at the student’s level which leads to higher rates of success, positive outcomes, and increased motivation, thus. decreasing behavior issues.</li> </ul>
<input checked="" type="checkbox"/> Students who have dropped out of school and are now returning.	<ul style="list-style-type: none"> <li>- School culture and individualized instructional opportunities provide needed student support, such as Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Pre-assessments identify knowledge gaps to allow for targeted instruction.</li> <li>- Elective courses in core areas allow students to fill skill gaps due to high mobility.</li> <li>- Instructional focus on gaining skill mastery allows students to be more successful in required core coursework for graduation.</li> <li>- Flexible schedules provide opportunities for increased learning time to make up credit deficiencies.</li> </ul>
<input checked="" type="checkbox"/> Students in poor academic standing as demonstrated by being at least one year behind on grade level performance or academic credits.	<ul style="list-style-type: none"> <li>- Pre-assessments identify knowledge gaps to allow for targeted instruction.</li> <li>- Flexible schedules provide opportunities for increased learning time to make up credit deficiencies.</li> <li>- Content is accessible on-line 24/7.</li> <li>- Elective courses in core areas allow students to gain skill mastery so they will be more successful in required core coursework for graduation.</li> <li>- Teacher led support and direct instruction is provided by a highly effective instructional staff.</li> </ul>
<input checked="" type="checkbox"/> Students who are primary care givers or are financially responsible for dependents and, therefore, may require a flexible school schedule.	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 which provides for flexible schedules.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> </ul>
<input checked="" type="checkbox"/> Students who are adjudicated.	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 which provides for flexible schedules.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> </ul>

	<ul style="list-style-type: none"> <li>- Blended learning allows easier coordination with probation officers and counselors to align schedules and provide instructional materials as needed to support an uninterrupted educational program while students are in secure care.</li> <li>- Blended learning provides real-time academic progress data to stakeholders (as allowed by FERPA).</li> </ul>
<input checked="" type="checkbox"/> Students who are wards of the state and are in need of an alternative school setting.	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 which provides for flexible schedules.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Blended learning allows easier coordination with probation officers and counselors to align schedules and provide instructional materials as needed to support an uninterrupted educational program while students are in secure care or group homes.</li> <li>- Blended learning provides real-time academic progress data to stakeholders (as allowed by FERPA).</li> </ul>
<input checked="" type="checkbox"/> Students who are seeking blended learning environment	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 which provides for flexible schedules.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Teacher led support and direct instruction is provided by a highly effective instructional staff.</li> </ul>
<input checked="" type="checkbox"/> Students seeking a <u>Credit Recovery Alternative School</u> - Specifically designed to serve over-age, under-credited students who have dropped out of high school and who, by definition, cannot graduate within the standard number of years.	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 which provides for flexible schedules.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Flexible schedules allow students to exceed the minimum state requirement of 20 hours per week of educational time to make up deficiencies.</li> <li>- Teacher led support and direct instruction is provided by a highly effective instructional staff.</li> </ul>

**5. Describe the timeline for implementing the program change.**

Program changes outlined are currently being implemented. Ongoing program effectiveness reviews occur as part of a continuous improvement process.

## A. Education Plan

### A.1 Education Philosophy

Kestrel School, Inc. /Kestrel High School is an alternative educational resource for high school students who have not been successful in a traditional school setting. The vision for Kestrel School, Inc. /Kestrel High School is one of high academic achievement for all high school students within a safe learning environment while equipping students for the choices and challenges of living and working in an ever changing, fast paced, technological society. The foundational philosophy at Kestrel School, Inc. /Kestrel High School is that all students will improve academically by increasing instructional time and focusing instructional efforts on student needs. The school's blended learning instructional program provides the flexibility and additional time required to allow all students to be successful, especially students traditionally underserved, behind on credits, or those in need of a flexible schedule and alternative learning environment. The following is our new Mission Statement (Approved by ADE in Spring 2013 and submitted to ASBCS 2/04/14).

*“Our Mission is to provide quality educational opportunities by recognizing individual student needs, in a safe and supportive environment. We encourage self-empowerment by teaching the intellectual and social skills necessary to meet the challenges in our society. We will support an alternative school population that needs to recover credits in order to graduate on time.”*

Many studies have been conducted to compare blended learning models of instruction with traditional face-to-face models of instruction. The results are strongly in favor of blended learning models as a more effective method of instruction. Studies indicate improved test scores, a deeper understanding of content, and higher student satisfaction. (Tucker, 2012; Bonk and Graham, 2012; Adams, 2013).

“Blended learning provides a tailored approach with benefits from face-to-face and e-learning for delivering effective courses and programs by extending the classroom to make learning readily available anywhere and anytime. The implications regarding this research suggest that blended learning will maximize learning outcomes and impact job performance” (Adams, 2013).

Kestrel School, Inc. /Kestrel High School intends to make a positive difference in the lives of our students and the community by providing a high quality educational experience in a school environment that recognizes the needs of traditional and alternative students and blends technology and instruction into a teacher managed educational experience that provides each student superior opportunities for success.

**A.2 Target Population**

Kestrel School, Inc. /Kestrel High School is an alternative educational resource for high school students who have not been successful in a traditional school setting or students looking to engage in a blended learning environment. The typical student who enrolls at Kestrel School, Inc. /Kestrel High School has attended and withdrawn from at least one other school, is one year or more behind in the number of credits earned toward graduation, and has literacy and/or numeracy levels below their cohort grade level. Kestrel School, Inc. /Kestrel High School students generally have at least two additional significant barriers to completing their high school education, such as family history of dropping out, working full-time to provide income to family, pregnant or parenting status, substance use, gang involvement, involvement with the juvenile justice system (including wards of the state or adjudication), disruptive behavior, or other external issues.

Kestrel School, Inc. /Kestrel High School has evolved over the last decade to better meet the needs of the students who are seeking enrollment, thus, the need to update the Program of Instruction. For many students, Kestrel School, Inc. /Kestrel High School serves as a Credit Recovery Alternative School, specifically designed to serve over-age, under-credited students who have dropped out of high school and who, by definition, cannot graduate within the standard number of years. The blended learning approach appeals to a wide range of students by allowing students to access the content 24/7. By providing increased access to learning time students can accelerate/recover credits needed for graduation or increase the number of hours of remediation.

Although the student teacher ratio is approximately 35 to 1, small group instruction and individualized targeted skill support are part of the instruction provided to students.

The table below identifies the target populations and how the program of instruction will provide an opportunity for increased student achievement for each group of students.

<b>Target Population being served at Kestrel School, Inc. /Kestrel High School</b>	<b>Benefit of Kestrel School, Inc. /Kestrel High School Blended Learning Instruction</b>
<input checked="" type="checkbox"/> Students who have a documented history of disruptive behavior issues.	<ul style="list-style-type: none"> <li>- Blended learning allows for individualized approach to limit potential disruptive interactions.</li> <li>- Blended learning provides needed support and coursework at the students level which leads to higher rates of student success, positive outcomes, and increased motivation, decreasing behavior issues.</li> </ul>
<input checked="" type="checkbox"/> Students who have dropped out of school and are now returning.	<ul style="list-style-type: none"> <li>- School culture and individualized instructional opportunities provide needed student support, such as Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Pre-assessments identify knowledge gaps to allow for targeted instruction.</li> <li>- Elective courses in core areas allow students to fill skill gaps due to high mobility.</li> <li>- Instructional focus on gaining skill mastery allows students to be more successful in required core coursework for graduation.</li> </ul>

	<ul style="list-style-type: none"> <li>- Flexible schedules provides opportunities for increased learning time to make up credit deficiencies.</li> </ul>
<p><input checked="" type="checkbox"/> Students in poor academic standing as demonstrated by being at least one year behind on grade level performance or academic credits.</p>	<ul style="list-style-type: none"> <li>- Pre-assessments identify knowledge gaps to allow for targeted instruction.</li> <li>- Flexible schedules provides opportunities for increased learning time to make up credit deficiencies.</li> <li>- Content is accessible on-line 24/7.</li> <li>- Elective courses in core areas allow students to gain skill mastery so they will be more successful in required core coursework for graduation.</li> <li>- Teacher led support and direct instruction is provided by highly effective instructional staff.</li> </ul>
<p><input checked="" type="checkbox"/> Students who are primary care givers or are financially responsible for dependents and, therefore, may require a flexible school schedule.</p>	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 provides for flexible schedule for after school completion of course work.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Flexible communications with staff both synchronous and asynchronous.</li> </ul>
<p><input checked="" type="checkbox"/> Students who are adjudicated.</p>	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 provides for flexible schedule.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Blended learning allows easier coordination with probation officers and counselors to align schedules and provide instructional materials as needed to support an uninterrupted educational program while students are in secure care.</li> <li>- Blended learning allows for providing real-time academic progress data to stakeholders (as allowed by FERPA).</li> </ul>
<p><input checked="" type="checkbox"/> Students who are wards of the state and are in need of an alternative school setting.</p>	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 provides for flexible schedule.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Blended learning allows easier coordination with probation officers and counselors to align schedules and provide instructional materials as needed to support an uninterrupted educational program while students are in secure care.</li> <li>- Blended learning allows for providing real-time academic progress data to stakeholders (as allowed by FERPA).</li> </ul>
<p><input checked="" type="checkbox"/> Students who are seeking blended learning environment</p>	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 provides for flexible schedule.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Teacher led support and direct instruction are provided by a highly effective instructional staff.</li> </ul>
<p><input checked="" type="checkbox"/> Students seeking a <u>Credit Recovery Alternative School</u> - Specifically designed to serve over-age, under-credited students who have dropped out of high school and who, by definition, cannot graduate within the standard number of years.</p>	<ul style="list-style-type: none"> <li>- Content is accessible on-line 24/7 provides for flexible schedule.</li> <li>- Web-based access to teacher support beyond the regular teacher schedule.</li> <li>- Flexible schedule allows students to exceed the minimum 20 hours of educational time to make up deficiencies.</li> <li>- Teacher led support and direct instruction are provided by a highly effective instructional staff.</li> </ul>

### **A.3 Program of Instruction**

Kestrel School, Inc. /Kestrel High School's computerized content delivery system (CDS) blended learning instructional program will provide a realistic and challenging educational option to the students and parents who are seeking or in need of alternative methods of satisfying promotion requirements and graduation requirements outside the a traditional school program. The blended learning approach provides additional delivery methods that will allow more students to fully participate in high school and earn their high school diplomas.

In conjunction with highly effective teaching staff the CDS provides significant alternatives to traditional education for the twenty-first century high school student. By incorporating a flexible, diverse delivery system, traditional and alternative students can modify their academic schedules for a balanced life of scholastics, work, family commitments, medical treatments, community service, etc.

Courses are developed using a stringent, research-based process that starts with a review of state academic standards to determine required learning outcomes. The computerized content delivery system content is supplemented with teacher developed materials that support the Arizona College and Career Ready Standards and learning objectives. The courses are designed by a team of highly qualified educators and feature rigorous assessments, lessons, activities, and exams, ensuring that students employ all levels of critical thinking. The curriculum is supported by a highly qualified development team and is regularly updated to meet changing state and national standards.

The content delivery and learning management system is a web-delivered program that allows access to all assigned courses 24 hours a day, 7 days a week, 365 days a year. The content is delivered in a low-bandwidth format that enables students to efficiently and effectively access their courses. As there is no requirement for supplemental text, students can be enrolled in courses through the web and provided extensive instructional support, as required, through the systems secure internal email system.

Kestrel School, Inc. /Kestrel High School/Arizona Preparatory Academy's computerized content delivery system (CDS) instructional program is prepared to offer a comprehensive online program of study that meets graduation requirements for cohort 2011, 2012, 2013, and beyond. A variety of over thirty four one-year, two semester courses and more than eleven half-year, one semester courses are available for students through the computerized content delivery system.

Courses contain full content, daily lessons, formative unit quizzes and a summative final exam per term.

Courses are also available in a pre-assessment delivery option that enables the student to exhibit competency in each individual content objective. Based on a predetermined benchmark percentage, the competency level is identified at the time the assessment course is developed. The delivery of pre-assessment courses will be available for credit recovery students, but may also be used for other

students based on teacher/counselor recommendation and administrator approval. These exceptions may be appropriate due to unique student needs, such as homebound, suspension, or transfers student.

The School's staff and an independent third-party have reviewed the curriculum to ensure alignment with Arizona College and Career Ready standards. The content is screened regularly to ensure that changes in Arizona standards are identified within the content. The CDS also provides online curriculum forums that allow staff to communicate curriculum issues to the content provider's curriculum development staff. School staff identifying issues with alignment, links, or errors can send a message directly to the content developers for clarification or editing. The content provider's development staff responds with a correction to the content or an explanation as to why the current format or content entry is appropriate.

Kestrel School, Inc. /Kestrel High School/Arizona Preparatory Academy's computerized content delivery system (CDS) instructional program includes additional web-based prescriptive remediation tools. These tools optimize the opportunity for teachers to remediate an individual student's academic skills as ongoing formative and summative assessments identify the need. Additionally, an online AIMS preparation content is used to backfill learning gaps and prepare students for standardized testing.

The school's instructional program also includes an AIMS / Common Core Academy. Participation in the academy helps students and teachers to identify core skill gaps, provides for targeted instructional opportunities, and clearly assesses mastery of state standards. Extensive tools are also available to prepare students for the state's standardized exams (AIMS).

In order to foster an environment of RTI, leading to a high level of student achievement, the CDS has summative and formative assessment programs in place to guide and empower teacher instruction.

To successfully meet the needs of each student, lessons and supplemental activities assist teachers with differentiating instruction for ability levels and experiences. Supplemental activities in the curriculum are designed for students who learn in different ways. The web-based delivery platform provides multiple capabilities to address diverse learning styles. Students can work from the computer, directly online or print lessons and submissions if they prefer hard copy. Students who are auditory can use a screen reader to enhance their learning experience. ELL students can use an online translation program to enhance their comprehension of the content. Kestrel School, Inc. /Kestrel High School students are encouraged to access all resources available through the CDS and direct instruction options.

Teachers providing direct instruction can use the same content as the computerized delivery system, allowing a seamless blended learning approach. Small group instruction and individualized assistance are also part of the blended learning instructional approach.

Kestrel School, Inc. /Kestrel High School computerized content delivery system (CDS) instructional program is designed and implemented with a methodology that supports Response to Intervention (RTI). In order to accelerate learning for all students, the CDS will assist teachers by developing a RTI framework for making instructional decisions based on data collected from the CDS formative and summative assessment tools. Formative assessments that provide immediate and ongoing feedback are provided in each course. The CDS provides monitoring and assessment tools in the form of audit and item audit reports. These tools provide real-time assessment of student progress, participation, and performance fostering a proactive approach to each students leaning.

Each CDS course includes a series of formative assessments that are submitted by the participating student. A student's results on these formative assessments gives the teacher immediate feedback on student performance, participation, and progress. This immediate feedback enables the teacher to proactively respond to individual student need. Based on the results of the assessments, teachers may remediate the objective with an additional assignment, require the student to redo the lesson, or provide an alternative assignment as deemed necessary.

Summative assessments given at course completion not only indicate knowledge acquisition and application, but also indicate mastery on identified state standards. At the end of each course students receive credit for completing seat time as well as demonstrating mastery of the course content at 70% level.

Program changes outlined are currently being implemented. Ongoing program effectiveness reviews occur as part of a continuous improvement process.

### **A.3.1 Mastery and Promotion**

Kestrel School, Inc. /Kestrel High School will not serve any grade below 9.

### **A. 3.2 Course Offerings and Graduation Requirements**

Kestrel School, Inc. /Kestrel High School has adopted the Arizona State credit requirements for High School Graduation. Please refer to the table below. Students must demonstrate mastery of content at a minimum of 70% proficiency level on course completion assessments to receive credit.

Kestrel School, Inc. /Kestrel High School/Arizona Preparatory Academy's computerized content delivery system (CDS) instructional program provides a rigorous, well-defined curriculum that equals the quality of academic programs the school community is accustomed to at the secondary level. Across the CDS curriculum, creative and critical thinking skills are fostered in students in an effort to equip them with effective problem-solving and decision-making abilities. The academic curriculum also incorporates state-of-the-art technology tools and instruction to prepare our students for post-secondary education, successful careers, and productive lives.

The math Content Delivery System (CDS) series includes courses for Algebra 1A,1B,2A & 2B , Geometry A & B, Functional Approach to Algebra 1A & 1B, Calculus 1A, and math electives for students not at grade level (such as Pre- Algebra 1 & 2, and Math Fundamentals 1A & 1B). All courses are aligned with the Arizona College and Career Ready Standards.

The Language Arts CDS series includes courses for English 9A through English 12B. All courses are aligned with the Arizona College and Career Ready Standards.

The computerized delivery system content includes science courses/virtual labs that the students performs off-campus and reports on in the CDS. The Science CDS series includes courses for Biology A & B, Physical Science A & B, Earth and Space Science A & B. The Social Science programs include World History 1 & 2, AZ American History 1& 2, Economics, and Government. Students seeking lab science for university entrance will be guided to an onsite web-lab option to fulfill these requirements. All Kestrel School, Inc. /Kestrel High School students will be encouraged to seek dual credit options with a local community college to satisfy the lab requirements for the state universities.

For those students inclined to pursue a college degree, it is imperative that academic college entrance requirements are fulfilled. As a result, Kestrel School, Inc. /Kestrel High School's computerized content delivery system (CDS) instructional program offers two years of Spanish (modern language credit) and Art History (fine arts credit) in addition to traditional college preparatory courses in math language arts, and social studies.

The below table summarizes the minimum credit requirements for Kestrel School, Inc. /Kestrel High School graduation in Arizona for the graduating class of 2013 and beyond.

English	4 credits
Math <sup>(1)</sup> <sup>(2)</sup>	4 credits
Science <sup>(3)</sup>	3 credits
Social Studies <sup>(4)</sup>	3 credits
CTE/Fine Art	1 credit
Electives	7 credits
<b>Total</b>	<b>22 credits</b>

*<sup>(1)</sup> Math courses shall consist of Algebra I, Geometry, Algebra II (or its equivalent) and an additional course with significant math content as determined by district governing boards or charter schools.*

*<sup>(2)</sup> The Algebra II requirement may be modified using a [Personal Curriculum](#) as outlined in R7-2-302.03.*

*<sup>(3)</sup> Three credits of science in preparation for proficiency at the high school level on the Arizona's Instrument to Measure Standards (AIMS) test.*

*<sup>(4)</sup> 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.*

# Kestrel Course Catalog

The following is a comprehensive list of available course content. The school will only offer selected courses from this list each term. HQ requirements will be met prior to opening a course for the term. Core content that is below high school grade level will only be assigned as an elective to fill educational gaps for students.

## Language Arts (ELA)

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### English 7, Semester A (elective)

#### Unit 1: Courage and Survival

This unit focuses primarily on essential reading skills, such as understanding prefixes, suffixes, roots, phrases, clauses, character development, point-of-view, plot, and themes. Learners read a variety of texts, focusing on novels with themes of courage and survival.

#### Unit 2: Facing Challenges

This unit focuses primarily on essential reading skills, such as synonyms, antonyms, tenses, modifiers, and text and organizational structures. Learners read a variety of nonfiction texts to learn about both faraway places and people—and those closer to home—who have faced a variety of challenges.

#### Unit 3: Human Ingenuity

This unit focuses on reading skills, such as context clues, parts of speech, summarizing passages, purpose, main idea, supporting details, and oral presentations. Learners read a variety of passages for main ideas and details and present both oral and written summaries of their findings.

#### Unit 4: Writer's Workshop

This unit delves deeply into a variety of writing skills, including grammar, mechanics, capitalization, proper nouns, topic selection, note-taking, peer review, and drafting.

### English 7, Semester B (elective)

#### Unit 1: Poetry Workshop

Learners study and apply grammar rules regarding subject-verb agreement and pronouns and explore a variety of poetic forms. Learners study poetry types, figurative language, imagery, and tone as they analyze and write poetry.

#### Unit 2: Convictions

Learners examine a variety of informational texts and then write persuasive essays by supporting original thesis with facts and evidence.

#### Unit 3: Beyond Stereotypes

Learners examine authors' uses of symbolism, dialogue, and description as they learn about bias and stereotyping, examine advertising strategies, and participate in group discussions.

#### Unit 4: Research Project

Learners use conventions in grammar and spelling as they conduct an in-depth research project by following the writer's workshop process.

## English 8, Semester A (elective)

### Unit 1: Who I Am, Who I Want to Be

Learners explore strategies for determining word meaning. They read a variety of fictional works to both understand the elements of plot and determine how authors use historical contexts in their writing. Learners also experiment with script-writing.

### Unit 2: Poetry Workshop

Learners explain uses of figurative language and explore their uses through poetry analysis and writing. Learners also learn about correct use of quotation marks and contractions.

### Unit 3: Heritage

Learners explore stories of perseverance and heritage as they learn about summarizing texts and the different techniques that can help them understand informational texts. Learners also practice using modifiers with and without *ly*.

### Unit 4: Writer's Workshop

Learners practice writing skills, including using sentence variety, distinguishing phrases and clauses, and vocabulary development, as they complete a research paper using a writer's workshop process.

## English 8, Semester B (elective)

### Unit 1: Plays

Learners examine a variety of plays to determine the influence history and culture can have on the plot elements and tone of a work. Learners also focus on paraphrasing, the use of active voice, and idiom.

### Unit 2: Persuasion

Learners practice accessing prior knowledge, using visualization techniques, and creating graphic organizers to increase reading comprehension.

### Unit 3: Mythology

Learners analyze word choice and learn the conventions of mythology as well as comparison and contrast essay writing. In skills building, learners work with homonyms, fix double negatives, and write effective transitions.

### Unit 4: Research Project

Learners participate in collaborative research projects as they pose questions, separate fact from opinion, select and analyze Internet resources, and collaboratively write, revise, and present their projects.

## English 9, Semester A v.3.0 - also available in vCourses

### Unit 1: Persuasion and Audience

Learners explore a variety of media messages and propaganda techniques and the impact that they can have on the reader.

### Unit 2: Using Your Imagination

Learners practice accessing prior knowledge, using visualization techniques, and creating graphic organizers to increase reading comprehension.

### Unit 3: Analysis Narratives

Learners establish goals as they identify literary elements as well as facts and opinions in literature.

### Unit 4: Reading and Interpreting Poetry

Learners are exposed to a variety of poetry types, as well as to how the language of poetry speaks to individuals and groups.

### Unit 5: Using and Understanding Dialogue

Learners analyze how and when dialogue is effectively used in literature.

## English 9, Semester B v.3.0 - also available in vCourses

### Unit 1: Understanding the Main Idea

Learners will analyze the main idea of a written work and explore the differences and similarities between habits, traditions, and customs as they read the work.

### Unit 2: Understanding and Appreciating Differences

Learners will read a variety of literature and analyze differences in perspective to increase their awareness, understanding, acceptance, and appreciation of individual and group differences.

### Unit 3: Reading and Writing Letters

Learners will apply the structural, linguistic, and punctuation rules pertaining to the business and personal forms of letters.

### Unit 4: Conducting Research

Learners will research a topic, draw conclusions from the research, and give an analysis, along with supporting evidence. Learners will also explore the contributions that American inventors have made through their inventions.

## English 10, Semester A – also available in vCourses

### Unit 1: Preparing for the Workplace

Learners improve reading strategies by finding out what resources to use while reading, what questions to ask while reading, how to find answers to those questions, and how to review material they have read. Learners will also analyze technical documents, learn how to conduct a career search, and apply writing skills to writing a business letter.

### Unit 2: Critical Reading

Learners build vocabulary and improve reading comprehension by reading social science–related literature. They also conduct critical research, read and evaluate articles, and express conclusions by synthesizing findings in a presentation.

### Unit 3: Persuasion

Learners develop techniques to strengthen arguments, motivate audiences, and influence thinking. They also apply grammar conventions and conduct peer reviews to improve their writing.

### Unit 4: Reading Historical Fiction

Learners study how history influences literature and how literature reveals history, helping them to better understand and interpret historical fiction and to notice and comprehend historical references in works they read.

### Unit 5: Writing for Precision

Learners practice selecting and focusing on a topic, using precise wording, and creating and applying correct grammar to their writing. They then apply those skills to writing a research paper and conducting peer reviews to improve their writing.

## English 10, Semester B – also available in vCourses

### Unit 1: Building Reading Strategies

Learners develop strategies that will help them improve their vocabulary and increase their reading comprehension.

### Unit 2: Reading Sciences

Learners develop science vocabulary, read and analyze scientific articles and essays, and write a position paper.

### **Unit 3: Analysis of Fiction**

Learners identify and describe elements of plot and characters from a story as well as analyze and critique literature.

### **Unit 4: Analysis of Poetry**

Learners will identify and describe literary devices, explore and analyze various writing techniques used in poetry, and apply this knowledge to write poetry.

### **Unit 5: Narratives**

Learners apply writing strategies learned in previous units to their personal narrative writings.

## English 11, Semester A – also available in vCourses

### **Unit 1: The Writing Process**

This unit focuses on early American literature through 1800. Learners will analyze the theme and style of texts from this period. They will focus on literary forms, techniques, and style. They will also continue to learn about writing skills, including the use of basic rules of spelling and grammar.

### **Unit 2: Early American Literature (to 1800)**

This unit focuses on early American literature through 1800. Learners will analyze the theme and style of texts from this period. They will focus on literary forms, techniques, and style. They will also continue to learn about writing skills, including the use of basic rules of spelling and grammar.

### **Unit 3: Fiction**

This unit focuses on the structure of fiction, including plot, setting, tone, characterization, and theme. Learners will explore these elements of fiction through reading passages and creating their own original writing.

### **Unit 4: American Romanticism Literature (1800–1860)**

This unit focuses on American Romanticism literature from 1800–1860. Learners will focus on elements of text, including main ideas and supporting details. They will also learn about specific reading and writing skills, such as understanding the main idea and writing summaries.

### **Unit 5: American Masters Literature**

This unit focuses on the American Masters (primarily Walt Whitman and Emily Dickinson) in literature. Learners will read a variety of passages to analyze theme and style in poetry. Learners will also develop their understanding of vocabulary.

## English 11, Semester B – also available in vCourses

### **Unit 1: America Grows Up (1860–1914)**

This unit focuses on American literature from the Civil War through the early twentieth century. Learners will analyze the theme and style of works. In addition, learners will focus on elements of grammar and implied meanings in some lessons.

### **Unit 2: Poetry**

This unit focuses on elements of poetry. Learners will read a variety of passages, primarily from the poetry of Walt Whitman and Emily Dickinson, to learn about rhyme scheme, meter, and recitation. Learners will also create original poetry.

### **Unit 3: Prosperity and Depression Literature (1914–1939)**

This unit focuses on American literature from the start of World War I through the Roaring Twenties and the Great Depression. Learners will read passages from a variety of selections from this period and will analyze literature for the author's unique style, use of analogy, and general grammar conventions.

#### **Unit 4: Contemporary American Literature (1939–Present)**

This unit focuses on contemporary literature of the mid-twentieth century through today. Learners will read a variety of texts and passages from Southern Gothic to works borne of the Harlem Renaissance and the civil rights movement, Hispanic American writings, and postmodernism. Learners will also focus on elements of grammar and enhance their reading skills by learning how to use textual clues and how to understand the structure and organization of nonfiction texts.

#### **Unit 5: Historical Investigative Reports**

This unit focuses on the analysis of expository and literary texts. Learners will develop skills that help them to analyze and present information. The unit culminates in a project in which learners will write a historical investigative report.

### **English 12, Semester A – also available in vCourses**

#### **Unit 1: The Writing Process**

This unit focuses on basic skills, sentence structure, and the steps of the writing process. Learners experiment with sentence structure and work on the skills of peer reviewing and revising their own writing.

#### **Unit 2: Early English Literature**

This unit focuses on basic skills, such as word origins, and also introduces students to themes found in literature, plot, and setting. Learners will experiment with logical sequencing to understand directions, comparisons, and cause and effect. This symbol (\*\*) indicates that there are additional resource materials that must be downloaded for students to complete the online courseware. These materials can be found on the Edmentum Support Site.

#### **Unit 3: Rhetoric and Persuasion**

This unit focuses on skill development in the areas of subject and predicate relationships, connotation and denotation in word study, and elements of grammar. Learners will analyze media tactics and persuasive elements in political speeches.

#### **Unit 4: The English Renaissance**

This unit focuses on grammar and language skills. Learners will develop their abilities to write business letters and analyze information that is presented graphically. Learners will analyze aspects of drama, culminating in an analysis of a play by Shakespeare. This symbol (\*\*) indicates that there are additional resource materials that must be downloaded for students to complete the online courseware. These materials can be found on the Edmentum Support Site.

#### **Unit 5: Poetry**

This unit focuses on poetry as students explore the uses of figurative language in this genre. Learners examine the meanings and conventions of figurative language and will develop language and grammar skills.

### **English 12, Semester B – also available in vCourses**

#### **Unit 1: The Age of Reason**

This unit focuses on a variety of literature types as students explore themes in works by authors such as Alexander Pope and Jonathan Swift. Learners examine analogy and satire in literature and learn about the variety of writing styles that can be employed in autobiography and persuasive speech. Skill work focuses on spelling rules.

#### **Unit 2: Fiction and Nonfiction Writing**

Learners will explore fiction techniques, concentrate on identifying characteristics and tone in different types of texts, and write an original short story. Skills work focuses on punctuation.

### **Unit 3: Romantic and Victorian Literature**

This unit focuses on the romantic and Victorian ages in British literature, with an examination of works by authors such as William Wordsworth, Samuel Taylor Coleridge, John Keats, Nathaniel Hawthorne, and Charles Dickens. Learners examine allegory in literature and focus their skill development on vocabulary development. They will also create interpretive presentations through both writing and performance. This symbol (\*\*) indicates that there are additional resource materials that must be downloaded for students to complete the online courseware. These materials can be found on the Edmentum Support Site and are accessed via the Edmentum Course Teacher Learning Path.

### **Unit 4: Contemporary Literature**

Learners will focus their skills development on using parallel structures in writing, summarizing text, and understanding idioms. They will work on research skills such as finding main ideas and identifying details that support the main idea and will explore universal themes in contemporary literature.

### **Unit 5: The Research Essay**

This unit focuses on developing research skills, including asking and answering questions, finding resources, and preparing for review, and culminates in writing an extended research paper. Skills work focuses on reading strategies and understanding the root meanings of words.

## **Advanced English – AP\* Edition, Semester A – *also available in vCourses***

### **Unit 1: Writing Academic Arguments about Literature**

Learners explore arguments in literature and the role of “reader as writer.” They analyze and evaluate academic arguments, recognizing the impact of a thesis. Learners will develop their own writing through use of evidence while focusing on common writing mistakes and effective revision techniques.

### **Unit 2: Reading and Writing about Essays**

Learners practice actively reading and critically annotating several types of essays. Learners will also identify and explain uses of key rhetorical elements and evaluate elements of persuasive essays. Learners end the unit by applying these principles as they draft and revise a college entrance personal essay.

### **Unit 3: Reading and Writing about Poetry**

Learners explore poetic structure and meaning, analyzing how tone, diction, allusion, and other poetic devices impact the poem. Learners explore denotative and connotative meaning, as well as rhythm, meter, and sound devices throughout the unit.

### **Unit 4: Close Analysis of Poetic Form and Content**

Learners apply knowledge from Unit 3 as they closely analyze poetry of different themes – love, death, fathers, and war. As they analyze poetry through their writing, learners close the unit by choosing one piece of writing to revise and improve.

### **Unit 5: Writing an Extended Interpretation of a Poem**

Building on their knowledge from Unit 4, learners spend Unit 5 writing essays about poetry they read. Learners develop thesis statements, support through evidence, and strengthen writing with transitions. Learners practice evaluating the effectiveness of essays by answering “So what?” and “How so?” throughout the paper before moving on to the revision stage.

## **Advanced English – AP\* Edition, Semester B – *also available in vCourses***

### **Unit 1: Writing Academic Arguments about Literature**

Learners actively read types of fiction, collecting literary evidence to support a thesis. Learners explore elements of fiction, such as character and dialogue, point of view, plot and structure, setting, irony, tone, and theme. Learners recognize effective approaches to writing critical essays on works of fiction.

## Unit 2: Close Analysis and Interpretation of Short Fiction

Diving deeper, learners evaluate the effectiveness of active reading techniques when applied to reading a representative essay. Learners explore the literary effect of character, point of view, plot and structure, and theme in short stories, as well as analyze the historical and cultural context of these stories. Learners apply their knowledge from Unit 1 as they write an academic argument, identifying the effective elements of a short story.

## Unit 3: Close Analysis and Interpretation of the Novel

Learners explore major literary periods through the novel. Learners read *Frankenstein* as they learn about developing an interpretive essay. Learners also practice writing skills, including thesis, supporting evidence, coherence, and revision of writing.

## Unit 4: Reading and Writing about Plays

Learners read a variety of plays as they learn to identify key elements, such as theme, plot and structure, character, gestures, and setting. Learners analyze characterization in plays and weigh the effectiveness of essays before writing their own. Learners then move through the writing process to complete an interpretive essay on a play

## Unit 5: Writing a Research-Based Literary Interpretation

Learners identify common literary theories to critical literary interpretation to prepare for a research based interpretive essay. Learners review the writing process, as well as gather, document, and paraphrase information during the research process. Using MLA in-text citation for quotes and paraphrased information, learners cite sources in footnotes or endnotes and include a list of works cited.

# Mathematics

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## Pre-Algebra, Semester A (elective)

### Unit 1: Whole Numbers

In this unit, students will perform the four operations (addition, subtraction, multiplication, and division) on whole numbers. They will explore the properties of whole numbers by comparing and ordering them, estimating, practicing special divisibility rules, and working with the commutative, associative, and distributive properties. They will also solve problems involving whole numbers and the operations.

### Unit 2: Fractions

In this unit, students will perform the four basic operations on fractions, as well as find the factors, prime factors, and greatest common factors of numbers in order to perform those operations. They will also find reciprocals and simplify fractions, as well as compare and order fractions and solve problems involving fractions.

### Unit 3: Decimals

This unit starts with decimal concepts such as place value and connections between decimals and fractions and whole numbers. Students will also perform the four basic operations on decimal numbers and will explore repeating decimals, rational and irrational numbers, mental math techniques with whole numbers and decimals, and will solve problems with decimal numbers.

### Unit 4: Ratios and Proportions, Percents, and Measurement

This unit starts by introducing the concept of percent and how it relates to fractions and decimals. It allows students to calculate percents (i.e., finding the percent of a whole or decimal number), find percent increases and decreases, solve problems with percents, and use mental math with fractions and percents. Students will then explore ratios and proportions, find proportions, and work with scaling and proportion. Students will also work with units of length, capacity, and weight and mass, and convert between Celsius and Fahrenheit temperatures.

## Pre-Algebra, Semester B (elective)

### Unit 1: Integers

In this unit, students explore the basic concepts of integers, including addition, subtraction, multiplication, and division. Students also learn about expressing integers in exponential and expanded forms, finding square roots of perfect and imperfect squares, writing numbers in scientific notation, and solving word problems with integers.

### Unit 2: Geometry

In this unit, students explore the meaning of lines, angles, and planes, as well as types of polygons and types of solid figures. They also explore special types of angles and triangles, including right triangles and the Pythagorean Theorem. They find circumference and perimeter, area of polygons and circles, volume, and surface area. They distinguish parallel and perpendicular lines, congruent and similar figures, and explore transformations such as translations and rotations, as well as tessellations.

### Unit 3: Statistics and Graphs

In this unit, students focus on statistical tools such as bar graphs, line graphs, scatter plots, and central tendencies. Students also learn about conducting surveys and experiments to collect data as well as determining probability of an event and a chance experiment. Additionally, they explore ways to critically analyze data and find trends in data.

### Unit 4: Expressions, Equations, and Inequalities

In this unit, students use the order of operations to evaluate expressions, perform operations on monomials and binomials, solve linear equations and inequalities, graph linear equations, and find slopes and y intercepts.

## Algebra 1, Semester A – also available in vCourses

### Unit 1: Relationships Between Quantities and Reasoning with Equations

This unit focuses on three CCSS domains that relate to expressions and equations:

A.SSE: Seeing Structure in Expressions

A.CED: Creating Equations

A.REI: Reasoning with Equations and Inequalities

### Unit 2: Linear and Exponential Relationships

This unit focuses on three CCSS domains as they relate to quadratic relationships:

N.RN: The Real Number System

A.REI: Reasoning with Equations and Inequalities

F.IF: Interpreting Functions

F.BF: Building Functions

## Algebra 1, Semester B – also available in vCourses

### Unit 1: Expressions and Equations

This unit focuses on three CCSS domains that relate to expressions and equations:

A.APR: Arithmetic with Polynomials and Rational Expressions

A.REI: Reasoning with Equations and Inequalities

### Unit 2: Quadratic Functions and Modeling

This unit focuses on three CCSS domains as they relate to quadratic relationships: F.IF:

Interpreting Functions

F.BF: Building Functions

F.LE: Linear, Quadratic, and Exponential Models

### Unit 3: Descriptive Statistics

This unit focuses on a single CCSS domain:  
S.ID: Interpreting Categorical and Quantitative Data

## Algebra 2, Semester A – also available in vCourses

### Unit 1: Polynomial, Rational, and Radical Relationships

This unit focuses the following CCSS domains that relate to polynomial, rational, and radical relationships:  
A.APR: Arithmetic with Polynomials and Rational Expressions  
A.REI: Reasoning with Equations and Inequalities  
A.SSE: Seeing Structure in Expressions  
N.CN: The Complex Number System  
F.IF: Interpreting Function

## Algebra 2, Semester B – also available in vCourses

### Unit 1: Trigonometric Functions

This unit focuses on a single CCSS domain that relates to trigonometric functions:  
F.TF: Trigonometric Functions

### Unit 2: Modeling with Functions

This unit focuses on three CCSS domains as they relate to quadratic relationships:  
A.CED: Creating Equations  
F.BF: Building Functions  
F.LE: Linear, Quadratic, and Exponential Models

### Unit 3: Inferences and Conclusions from Data

This unit focuses on these CCSS domains that relate to analysis of data:  
S.ID: Interpreting Categorical and Quantitative Data  
S.IC: Making Inferences and Justifying Conclusions  
S.MD: Using Probability to Make Decisions

## Geometry, Semester A – also available in vCourses

### Unit 1: Geometry Basics, Points, Lines, Planes, and Angles

This unit focuses on geometric problem-solving strategies, reasoning, conjectures, and the history of geometric systems. The unit also explores elements of geometry, including points, lines, planes, and angles.

### Unit 2: Parallel and Perpendicular Lines and Triangles

This unit focuses primarily on parallel and perpendicular lines, special angles, and triangles. Learners also write geometric proofs and explore congruence and inequality.

### Unit 3: Polygons and Area

This unit focuses on a variety of geometric shapes, including quadrilaterals, squares, rectangles, rhombi, parallelograms, trapezoids, and triangles. Learners compute area for a variety of shapes.

### Unit 4: Solid Figures and Volume

This unit focuses on solid figures, such as prisms, spheres, and polyhedra. Learners practice visualizing and finding the area and volume of three-dimensional objects.

## Geometry, Semester B – also available in vCourses

### Unit 1: Geometry of the Right Triangle and Right Triangle Trigonometry

This unit focuses on solving problems using right angles. Learners will use the Pythagorean Theorem and various trigonometric functions.

### Unit 2: Similarity, Congruency, and Transformations

This unit focuses primarily on geometric transformations, including congruence, similarity, symmetry, translations, and rotations. Learners will also use ratio and proportion and explore translations in real world situations.

### Unit 3: Circles

This unit focuses on the properties and attributes of circles, including arcs, chords, and angles. Learners also calculate area and circumference of circles.

### Unit 4: Geometry of the Coordinate Plane

This unit focuses on coordinate planes, including length, midpoint, slope, vectors, and transformations on a plane. Learners will use a variety of problem-solving strategies.

## Consumer Mathematics – also available in vCourses

### Unit 1: Mathematics Review

This unit covers approximately three weeks of instruction. It explains how four basic mathematical operations—addition, subtraction, multiplication, and division— can be used to solve real-life problems. It discusses how calculators simplify the process of solving such problems. Because students will come across situations in this course in which they will have to use fractions, decimals, and percentages, this section talks about the relationships between those elements and explains how they should be solved.

### Unit 2: Consumer Mathematics Skills

This unit covers approximately two weeks of instruction. It presents the factors that decide the cost and price of an item and discusses how paying sales tax and discounts affect the total price of an item. This unit also explains how to calculate sales tax and consumer discounts. In addition, it explains the necessity of giving tips to certain service providers and offers guidelines for determining the amount of a tip.

### Unit 3: Wages, Income Tax, and Money Management

This unit covers approximately two to three weeks of instruction. Once students start earning their own money, they will need to understand various options available to manage it. This unit will teach students how to correctly interpret a paycheck and understand paycheck deductions. It also presents the importance of paying taxes, the requirements for filing income tax returns, and the steps involved in calculating tax. This unit explains how students can regulate their income and expenditures by creating and following a budget. It discusses how they can use checking and savings accounts to protect and manage their money. It also shows how they can increase their money and plan a financially secure future by choosing a good investment strategy.

### Unit 4: Interest and Credit

This unit covers approximately two to three weeks of instruction. It deals with obtaining and repaying loans, as well as the various types of interest on loans and how interest is calculated. This unit also discusses the concept of credit, including how credit should be correctly used and managed and how building a good credit history has important benefits.

### Unit 5: Large Purchases

This unit covers approximately two weeks of instruction. It will help students make important decisions about buying or leasing a car and buying or renting a home. It presents the factors student should consider—such as costs, requirements, and personal preferences—that will help them make an informed choice. This unit also discusses the importance of insurance, different types of insurance, and how different insurance plans suit different purposes.

## **Unit 6: Economics and Finance**

This unit covers approximately two weeks of instruction. It explores how economics affects society, from a personal to a global level. This unit addresses the relevance of economic principles in everyday life and why we should be aware of them. It describes the concept of supply and demand and explains how the relationship between supply and demand affects the price we pay for goods and services. On a larger scale, this unit presents the economic indicators that describe a nation's economy. It also explains how the interaction between nations through international trade affects the global economy.

## **Pre-Calculus , Semester A – also available in vCourses**

### **Unit 1: Equations and Inequalities**

This unit provides the conceptual understanding of equations and inequalities. It begins by identifying different types of equations and inequalities and methods of solving them. It then explores linear equations in one and two variables and how to solve for a given variable. This unit also includes inequalities and how to solve for and represent their answers. The unit concludes by exploring absolute value equations and complex numbers and the correct steps to solve for them, as well as the three equation types, radical, rational, and power equations. This unit is essential in pre-calculus because it is a building block for later units.

### **Unit 2: Graphs**

This unit provides a basic understanding and application of graphs. The unit starts with the coordinate system and reviews how to graph equations. It shows how, given two graphed points, you can find the distance, midpoint, and equations of lines. It goes on to explain linear equations and their applications in depth. It concludes by explaining linear regression, which allows for multiple points of data to be included when finding a linear equation that represents a set of data.

### **Unit 3: Functions and Their Graphs**

This unit introduces the concept of functions, a core concept in pre-calculus. The rest of the course will be based on functions and function notation. The unit begins by describing functions in terms of their graphs and how transformations produce changes in the graphs. The unit shows how to combine functions and find inverse functions. It also presents many real-world applications of functions, showing how to represent them as functions and solve them both mathematically and graphically.

### **Unit 4: Polynomial and Rational Functions**

This unit is important in pre-calculus because it extends students' previous knowledge of quadratic functions into the realm of polynomial and rational functions, whose solutions require a variety of methods of factoring and finding roots. It then explains how to graph these functions, both by hand and with the use of a calculator. This unit concludes with how to solve polynomial and rational inequalities. This unit will allow students to work through many real-world examples based on polynomial and rational functions.

### **Unit 5: Exponential and Logarithmic Functions**

This unit is important in pre-calculus because many real-world problems can be explained and solved using exponential and logarithmic functions. The unit begins by introducing the basic forms of these functions and explaining how to solve for and graph them. It then discusses how to apply the functions to real-world situations and solve them. Overall, this unit covers how to recognize, write, and graph various exponential and logarithmic functions and use their properties to manipulate expressions and solve equations.

### **Unit 6: Trigonometric Functions**

In this unit, students learn about one of the key concepts in pre-calculus, trigonometry. This unit introduces the trigonometric functions by describing the interrelationships between the unit circle, angles, and their relationship to the Cartesian plane. This unit begins by reviewing some basic concepts relating to angles and expands to include the unit circle and trigonometric functions. It then covers the definition, description, and illustration of the key concepts of the trigonometric functions, including their relationship to angles, the unit circle, right triangles, graphs, periodic functions, and inverse trigonometric functions.

## Pre-calculus, Semester B – also available in vCourses

### **Unit 1: Trigonometric Identities and Conditional Equations**

This unit provides the conceptual understanding of trigonometric identities and conditional equations. It begins by examining the basic trigonometric identities and using them for simplifying expressions or solving equations. It explores identities that describe some of the relationships between functions and angles, and then expands on the relationships between multiple angles within trigonometric functions. This unit also looks at the product-sum and sum-product identities. The unit concludes by exploring techniques used to solve trigonometric equations.

### **Unit 2: Applications of Trigonometry**

This unit covers additional topics in trigonometry and their applications. The unit starts with the laws of sine and cosine and their applications. It then introduces vectors and applications of vectors to real-life problems. This unit also explores the polar coordinate system and shows how to graph complex numbers. It concludes by explaining conversion of complex numbers to trigonometric forms and using DeMoivre's theorem for finding roots of complex numbers.

### **Unit 3: Matrices and Systems of Equations and Inequalities**

This unit introduces the concept of matrices. It begins by exploring methods of solving both linear and nonlinear systems of equations. The unit then leads into the introduction of matrices as a way to solve for systems of equations. The unit examines the various terms used to describe matrices and their properties, as well as how to add, subtract, and multiply matrices. The unit covers inverse matrices and their real-life applications. It also explores the methods for graphing and solving systems of linear inequalities and concludes with solving linear programming problems.

### **Unit 4: Analytic Geometry: Conic Section**

This unit introduces and explores the conic sections. The unit starts with the introduction of each conic—the parabola, the circle, the ellipse, and the hyperbola. The unit examines the conic sections, their standard forms, graphs, and real-life applications. Then the unit covers the conics in more depth by explaining the translation and rotation of the coordinate axes. The unit concludes with solving the parametric form of equations and also covers their real-life applications.

### **Unit 5: Sequences, Induction, and Probability**

This unit brings together the topics of sequences, induction, and probability. The unit begins by introducing sequences and series and explores the various types of sequences. The unit then transfers to mathematical induction as a method of finding proofs. Lastly, the unit investigates probability, including permutations and combinations, and basic statistics involved with probability. This unit is important in pre-calculus because many real-world situations involve sequences and probabilities.

### **Unit 6: Limits: Introduction to Calculus**

This unit serves as a bridge from pre-calculus to calculus by introducing the fundamental concepts used in calculus, specifically limits, derivatives, and integrals. The unit begins by introducing the concept of a limit, and describes an iterative process to estimate limits using a table of values. The unit then explores limits in more depth, describing some basic arithmetic properties, as well as how to use limits to determine the continuity of a function. Lastly, the unit introduces derivatives by determining the slope of a tangent line at a point, and integrals by finding the area under a curve.

## Advanced Calculus – AP\* Edition, Semester A – *also available in vCourses*

### Unit 1: Functions/Prerequisites for Calculus

Learners explore functions and demonstrate graphing, manipulation and application of functions. Linear and trigonometric functions are reviewed, as well as their graphs. Learners categorize and describe functions, use different graphing methods, and explore transformation of functions.

### Unit 2: Limits

Learners examine the tangent problem and relate it to instantaneous velocity. Learners study limits using both a numerical and graphical approach, and calculate limits using the limit laws. The Squeeze Theorem and Intermediate Value Theorem are applied, and learners apply the precise definition of a limit to a function on a continuous interval.

### Unit 3: Derivatives

Learners explore derivatives in order to apply differentiation techniques in rates of change problems in the real world. Calculating rate of change, graphing, and determining differentiability and continuity are covered in this unit. Learners apply rules for differentiating functions and explore higher order derivatives. Learners explore Trigonometric and Implicit Functions, as well as differentiate using the chain rule.

### Unit 4: Applications of Derivatives

Building on the knowledge gained in Unit 3, learners continue to work with derivatives. Learners explore Fermet's Theorem, Newton's Method, the Mean Value Theorem, Rolle's Theorem, and the First and Second Derivative Tests. Learners apply techniques from limits and derivatives to curve sketching calculate related rates problems, and perform differentiation in order to solve applied problems in the areas of physics, business and economics.

## Advanced Calculus – AP\* Edition, Semester B – *also available in vCourses*

### Unit 1: The Definite Integral

Learners explore the concept of the anti-derivative by using the derivative. Learners find the area under a curve and use sigma notation to simplify limit problems. The Definite Integral is explored as learners use the comparison properties to ensure a plausible answer for a definite integral. Learners use the Net Change Theorem and perform integration using the Substitution Rule and use of tables of indefinite integrals. Learners continue working with performing integration of symmetric functions.

### Unit 2: Applications of Integrals

Using the knowledge from Unit 1, learners work with the application of integrals. Learners determine the area between two curves, calculate work, and use the Mean Value Theorem for Integrals to find average values. Volume is explored through both the Disk Method and the Cylindrical Shells Method. In both methods, learners are challenged to use technology and graphing to visualize the shapes, and perform integration to find the volume.

### Unit 3: Inverse Functions

Differentiating and evaluating integrals that include exponential and logarithmic functions begin this unit. Exponential growth and decay, as well as L'Hospital's Rule are explored. Learners continue to work with differentiating and evaluating integrals of Inverse Trigonometric and Hyperbolic Trigonometric Functions in the second half of the unit.

### Unit 4: Techniques of Integration

Learners work with a variety of integration techniques in this unit, beginning with integration by parts. Learners evaluate complex trigonometric functions and evaluate integrals by trigonometric substitution. Learners explore integration by partial fractions and the use of integration tables, and technology that can be used to evaluate integrals. A variety of methods (Midpoint Rule, Trapezoidal Rule, Simpson's Rule) for approximating an integral are used to explore graphically and calculate area, challenging learners to compare the results among methods. Improper Integrals are evaluated.

## Unit 5: Further Applications of Integration

In the final unit of the course, learners apply their knowledge of integration. Learners calculate the arc length of a continuous curve and surface area in practical settings. Applications to physics, biology, and engineering are explored as learners create and evaluate integrals that represent blood flow and cardiac output. Applications to economics and probability are also explored as learners create and evaluate integrals that represent consumer surplus and probabilities.

## Probability and Statistics – also available in vCourses

### Unit 1: Representing and Interpreting Data

#### Summary:

This unit focuses on one CCSS domain and cluster:

- S.ID: Interpreting Categorical and Quantitative Data
  - Summarize, represent, and interpret data on a single count or measurement variable.

Unit 1: Representing and Interpreting Data		
Day	Activity / Objective / Common Core State Standard	Type
1–2	Data Plots <ul style="list-style-type: none"><li>■ Objective: Represent data with plots on the real number line using dot plots, histograms, and box plots.</li><li>■ Common Core State Standard: S.ID.1. Represent data with plots on the real number line (dot plots, histograms, and box plots).</li></ul>	Lesson
3–4	Showing Data Center and Spread <ul style="list-style-type: none"><li>■ Objective: Use statistics appropriate to the shape of the data distribution to compare center and spread of two or more different data sets.</li><li>■ Common Core State Standard: S.ID.2. Use statistics appropriate to the shape of the data distribution to compare center (median, mean) and spread (interquartile range, standard deviation) of two or more different data sets.</li></ul>	Lesson
5–6	Interpreting the Shape of Data Distributions <ul style="list-style-type: none"><li>■ Objective: Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</li><li>■ Common Core State Standard: S.ID.3. Interpret differences in shape, center, and spread in the context of the data sets, accounting for possible effects of extreme data points (outliers).</li></ul>	Lesson
7–8	Normal Distributions <ul style="list-style-type: none"><li>■ Objective: Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages.</li><li>■ Common Core State Standard: S.ID.4. Use the mean and standard deviation of a data set to fit it to a normal distribution and to estimate population percentages. Recognize that there are data sets for which such a procedure is not appropriate. Use calculators, spreadsheets, and tables to estimate areas under the normal curve.</li></ul>	Lesson
9–10	Unit Activity—Unit 1	Unit Activity
11	Posttest—Unit 1	Assessment

## Unit 2: Relating Data Sets

### Summary:

This unit focuses on one CCSS domain and two related clusters:

- S.ID: Interpreting Categorical and Quantitative Data
  - Summarize, represent, and interpret data on two categorical and quantitative variables.
  - Interpret linear models.

Unit 2: Relating Data Sets		
Day	Activity / Objective / Common Core State Standard	Type
12–13	Relating Categorical Data <ul style="list-style-type: none"> <li>■ Objective: Summarize data for two categories in two-way frequency tables and interpret their relative frequencies in the context of the data.</li> <li>■ Common Core State Standard: S.ID.5. Summarize categorical data for two categories in two-way frequency tables. Interpret relative frequencies in the context of the data (including joint, marginal, and conditional relative frequencies).</li> </ul> Recognize possible associations and trends in the data.	Lesson
14–15	Interpreting Data as a Line <ul style="list-style-type: none"> <li>■ Objective: Interpret the slope and the intercept of a linear model in the context of the data.</li> <li>■ Common Core State Standard: S.ID.7. Interpret the slope (rate of change) and the intercept (constant term) of a linear model in the context of the data.</li> </ul>	Lesson
16–17	Relating Quantitative Data <ul style="list-style-type: none"> <li>■ Objective: Represent data of two quantitative variables using a scatter plot, describe and fit a function to the data, and solve problems in the context of the data.</li> <li>■ Common Core State Standard: S.ID.6. Represent data on two quantitative variables on a scatter plot, and describe how the variables are related.</li> <li>□ Fit a function to the data; use functions fitted to data to solve problems in the context of the data. Use given functions or choose a function suggested by the context. Emphasize linear, quadratic, and exponential models.</li> <li>□ Informally assess the fit of a function by plotting and analyzing residuals.</li> <li>□ Fit a linear function for a scatter plot that suggests a linear association.</li> </ul>	Lesson
18–19	Making and Interpreting Correlations <ul style="list-style-type: none"> <li>■ Objective: Use technology to compute and interpret the correlation coefficient of a linear fit.</li> <li>■ Common Core State Standard: S.ID.8. Compute (using technology) and interpret the correlation coefficient of a linear fit.</li> </ul>	Lesson
20–21	Correlation Versus Causation <ul style="list-style-type: none"> <li>■ Objective: Distinguish between correlation and causation.</li> <li>■ Common Core State Standard: S.ID.9. Distinguish between correlation and causation.</li> </ul>	Lesson
22–24	Unit Activity—Unit 2	Unit Activity
25	Posttest—Unit 2	Assessment

## Unit 3: Independent and Conditional Probability

### Summary:

This unit focuses on one CCSS domain and two related clusters:

- S.CP: Conditional Probability and the Rules of Probability
  - Understand independence and conditional probability and use them to interpret data.
  - Use the rules of probability to compute probabilities of compound events in a uniform probability model.

Unit 3: Independent and Conditional Probability		Type
Day	Activity / Objective / Common Core State Standard	
26–27	Sample Space <ul style="list-style-type: none"> <li>■ Objective: Describe events as subsets of a sample space (the set of outcomes).</li> <li>■ Common Core State Standard: S.CP.1. Describe events as subsets of a sample space (the set of outcomes) using characteristics (or categories) of the outcomes, or as unions, intersections, or complements of other events (“or,” “and,” “not”).</li> </ul>	Lesson
28–29	Applying the Addition Rule for Probability <ul style="list-style-type: none"> <li>■ Objective: Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model.</li> <li>■ Common Core State Standard: S.CP.7. Apply the Addition Rule, <math>P(A \text{ or } B) = P(A) + P(B) - P(A \text{ and } B)</math>, and interpret the answer in terms of the model.</li> </ul>	Lesson
30–31	Applying the Multiplication Rule for Probability <ul style="list-style-type: none"> <li>■ Objective: Apply the general Multiplication Rule in a uniform probability model and interpret the answer in terms of the model.</li> <li>■ Common Core State Standard: S.CP.8. (+) Apply the general Multiplication Rule in a uniform probability model, <math>P(A \text{ and } B) = P(A)P(B   A) = P(B)P(A   B)</math>, and interpret the answer in terms of the model.</li> </ul>	Lesson
32–33	Independent Events <ul style="list-style-type: none"> <li>■ Objective: Understand how to determine whether two events are independent of each other.</li> <li>■ Common Core State Standard: S.CP.2. Understand that two events A and B are independent if the probability of A and B occurring together is the product of their probabilities, and use this characterization to determine if they are independent.</li> </ul>	Lesson
34–35	Using Counting Techniques to Determine Probabilities <ul style="list-style-type: none"> <li>■ Objective: Use permutations and combinations to compute probabilities of compound events and to solve problems.</li> <li>■ Common Core State Standard: S.CP.9. (+) Use permutations and combinations to compute probabilities of compound events and solve problems.</li> </ul>	Lesson
36–37	Conditional Probability <ul style="list-style-type: none"> <li>■ Objective: Understand the conditional probability of event A given event B and interpret the independence of events A and B.</li> <li>■ Common Core State Standard: S.CP.3. Understand the conditional probability of A given B as <math>P(A \text{ and } B)/P(B)</math>, and interpret independence of A and B as saying that the conditional probability of A given B is the same as the probability of A, and the conditional probability of B given A is the same as the probability of B.</li> </ul>	
38–40	Unit Activity—Unit 3	Unit Activity
41	Posttest—Unit 3	Assessment

## Unit 4: Applying Probability

### Summary:

This unit focuses on two CCSS domains and three related clusters:

- S.CP: Conditional Probability and the Rules of Probability
  - Understand independence and conditional probability and use them to interpret data.
  - Use the rules of probability to compute probabilities of compound events in a uniform probability model.
- S.MD: Using Probability to Make Decisions
  - Use probability to evaluate outcomes of decisions.

Unit 4: Applying Probability		
Day	Activity / Objective / Common Core State Standard	Type
42–43	Interpreting Two-Way Frequency Tables <ul style="list-style-type: none"> <li>■ Objective: Use a two-way table as a sample space to decide whether events are independent and to approximate conditional probabilities.</li> <li>■ Common Core State Standard: S.CP.4. Construct and interpret two-way frequency tables of data when two categories are associated with each object being classified. Use the two-way table as a sample space to decide if events are independent and to approximate conditional probabilities.</li> </ul>	Lesson
44–45	Using Probability to Make Fair Decisions <ul style="list-style-type: none"> <li>■ Objective: Apply counting rules to determine probabilities and use them to make fair decisions.</li> <li>■ Common Core State Standard: S.MD.6. (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator).</li> </ul>	Lesson
46–47	Using Probability to Analyze Decisions and Strategies <ul style="list-style-type: none"> <li>■ Objective: Apply counting rules to analyze decisions and strategies using probability concepts.</li> <li>■ Common Core State Standard: S.MD.7. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).</li> </ul>	Lesson
48–49	Applying Conditional Probability and Independence <ul style="list-style-type: none"> <li>■ Objective: Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.</li> <li>■ Common Core State Standard: S.CP.5. Recognize and explain the concepts of conditional probability and independence in everyday language and everyday situations.</li> </ul>	Lesson
50–51	Interpreting Conditional Probability <ul style="list-style-type: none"> <li>■ Objective: Find the conditional probability of event A as it relates to event B and interpret the answer in terms of the model.</li> <li>■ Common Core State Standard: S.CP.6. Find the conditional probability of A given B as the fraction of B's outcomes that also belong to A, and interpret the answer in terms of the model.</li> </ul>	Lesson
52–54	Unit Activity—Unit 4	Unit Activity
55	Posttest—Unit 4	Assessment

## Unit 5: Making Inferences and Conclusions

### Summary:

This unit focuses on one Common Core State Standard domain and its two related clusters:

- S.IC: Making Inferences and Justifying Conclusions
  - Understand and evaluate random processes underlying statistical experiments.
  - Make inferences and justify conclusions from sample surveys, experiments, and observational studies.

Unit 5: Making Inferences and Conclusions		
Day	Activity / Objective / Common Core State Standard	Type
56–57	Making Inferences Based on Statistics <ul style="list-style-type: none"> <li>■ Objective: Understand statistics as a process for making inferences about population parameters based on a random sample from that population.</li> <li>■ Common Core State Standard: S.IC.1. Understand statistics as a process for making inferences about population parameters based on a random sample from that population.</li> </ul>	Lesson
58–59	Evaluating the Validity of a Statistical Model <ul style="list-style-type: none"> <li>■ Objective: Decide if a specified model is consistent with results from a given data-generating process (such as a simulation).</li> <li>■ Common Core State Standard: S.IC.2. Decide if a specified model is consistent with results from a given data-generating process, e.g., using simulation.</li> </ul>	Lesson
60–61	Using Statistics in Surveys, Experiments, and Studies <ul style="list-style-type: none"> <li>■ Objective: Recognize the purposes of and differences among sample surveys, experiments, and observational studies.</li> <li>■ Common Core State Standard: S.IC.3. Recognize the purposes of and differences among sample surveys, experiments, and observational studies; explain how randomization relates to each.</li> </ul>	Lesson
62–63	Analyzing a Survey <ul style="list-style-type: none"> <li>■ Objective: Use data from a sample survey to estimate a population mean or proportion and develop a margin of error through the use of simulation models for random sampling.</li> <li>■ Common Core State Standard: S.IC.4. Use data from a sample survey to estimate a population mean or proportion; develop a margin of error through the use of simulation models for random sampling.</li> </ul>	Lesson
64–65	Statistically Comparing Two Treatments <ul style="list-style-type: none"> <li>■ Objective: Use data from a randomized experiment to compare two treatments and use simulations to decide if differences between parameters are significant.</li> <li>■ Common Core State Standard: S.IC.5. Use data from a randomized experiment to compare two treatments; use simulations to decide if differences between parameters are significant.</li> </ul>	Lesson
66–67	Evaluating Reports Based on Data <ul style="list-style-type: none"> <li>■ Objective: Evaluate reports based on data.</li> <li>■ Common Core State Standard: S.IC.6. Evaluate reports based on data.</li> </ul>	Lesson
68–71	Unit Activity—Unit 5	Unit Activity
72	Posttest—Unit 5	Assessment

## Unit 6: Using Probability to Make Decisions

### Summary:

This unit focuses on one Common Core State Standard domain and its two related clusters:

- S.MD: Using Probability to Make Decisions
  - Calculate expected values and use them to solve problems.
  - Use probability to evaluate outcomes of decisions.

Unit 6: Using Probability to Make Decisions		
Day	Activity / Objective / Common Core State Standard	Type
73–74	Random Variables <ul style="list-style-type: none"> <li>■ Objective: Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space and graph the corresponding probability distribution.</li> <li>■ Common Core State Standard: S.MD.1. (+) Define a random variable for a quantity of interest by assigning a numerical value to each event in a sample space; graph the corresponding probability distribution using the same graphical displays as for data distributions.</li> </ul>	Lesson
75–76	Expected Value of a Random Variable <ul style="list-style-type: none"> <li>■ Objective: Calculate the expected value of a random variable and interpret it as the mean of the probability distribution.</li> <li>■ Common Core State Standard: S.MD.2. (+) Calculate the expected value of a random variable; interpret it as the mean of the probability distribution.</li> </ul>	Lesson
77–78	Making Predictions Based on Probabilities <ul style="list-style-type: none"> <li>■ Objective: Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated and find the expected value.</li> <li>■ Common Core State Standard: S.MD.3. (+) Develop a probability distribution for a random variable defined for a sample space in which theoretical probabilities can be calculated; find the expected value.</li> </ul>	Lesson
79–80	Making Predictions Based on Empirical Data <ul style="list-style-type: none"> <li>■ Objective: Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically and find the expected value.</li> <li>■ Common Core State Standard: S.MD.4. (+) Develop a probability distribution for a random variable defined for a sample space in which probabilities are assigned empirically; find the expected value.</li> </ul>	Lesson
81–82	Ins and Outs of Expected Value <ul style="list-style-type: none"> <li>■ Objective: Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.</li> <li>■ Common Core State Standard: S.MD.5. (+) Weigh the possible outcomes of a decision by assigning probabilities to payoff values and finding expected values.</li> <li>□ Find the expected payoff for a game of chance. For example, find the expected winnings from a state lottery ticket or a game at a fast food restaurant.</li> <li>□ Evaluate and compare strategies on the basis of expected values. For example, compare a high-deductible versus a low-deductible automobile insurance policy using various, but reasonable, chances of having a minor or a major accident.</li> </ul>	Lesson
83–84	Fair Decisions with Random Variables <ul style="list-style-type: none"> <li>■ Objective: Solve for probabilities in complex situations that go beyond counting rules and use these probabilities to make fair decisions.</li> <li>■ Common Core State Standard: S.MD.6. (+) Use probabilities to make fair decisions (e.g., drawing by lots, using a random number generator). [Include complex situations beyond counting rules.]</li> </ul>	Lesson

85–86	<p>Complex Decisions Using Probability</p> <ul style="list-style-type: none"> <li>■ Objective: Analyze decisions and strategies in complex situations, using probability concepts that go beyond counting rules.</li> <li>■ Common Core State Standard: S.MD.7. (+) Analyze decisions and strategies using probability concepts (e.g., product testing, medical testing, pulling a hockey goalie at the end of a game).</li> </ul>	Lesson
87–89	Unit Activity—Unit 6	Unit Activity
90	Posttest—Unit 6	Assessment

## Science

### Biology, Semester A, Version 2.0 (replaced by Version 3.0)

#### Unit 1: Introduction to Biology

Students will begin by exploring the basics of biology, limitations on theories, and societal issues.

#### Unit 2: The Energy and Chemistry of Life

This unit covers concepts related to the energy and chemistry of life, including cellular respiration, photosynthesis, enzymes, and biochemistry.

#### Unit 3: Cell Structure and Specialization

This unit focuses on concepts related to cell structure and specialization, including cell structure, division, and diseases.

#### Unit 4: Genetics and Evolution

This unit focuses on concepts related to genetics and evolution, including DNA, Mendel, genes, and amino acids.

### Biology, Semester B, Version 2.0 (replaced by Version 3.0)

#### Unit 1: Ecology

This unit focuses on concepts related to ecology, including the biosphere, biomes, human interactions with the environment, ecosystems, and population ecology.

#### Unit 2: The Diversity of Life

This unit focuses on concepts related to the diversity of life, including classification, plants, vertebrates, and invertebrates.

#### Unit 3: Plants and Animals

This unit focuses on the biology of plants and animals (and their parts) including the leaf, stems, roots, sponges, mollusks, birds, the liver, and muscle contraction.

### Biology – Semester A, Version 3.0— *also available in vCourses*

#### Unit 1: Nature of Life

Learners begin the course applying the scientific method to scientific problems and laboratory investigations. Learners prepare for the semester's labs by learning how to safely use equipment such as Bunsen burners, graduated cylinders, microscopes, and balances, as well as being able to communicate result data through charts and graphs. Building a base of chemistry concepts and exploring water, acids bases, buffers, and carbon continue preparing learners for the course.

## **Unit 2: The Chemistry of the Cell**

This unit includes a lab on Enzyme Catalysis. Learners explore polymers and describe how carbohydrates, lipids, proteins, and nucleic acids function in natural systems. Learners will recognize that energy transformation through metabolic pathways is a core process which defines life. Learners explain the structure, function, and denaturation of enzymes, while also discussing the “induced fit” hypothesis in enzyme action. Prokaryotic and eukaryotic cells are compared.

## **Unit 3: Cell Structures and Functions**

Learners begin with an overview of cell structures and functions, and then explain how materials are transported in and out of cells. Learners discuss in detail how cells use organic compounds as their energy source and how photosynthesis allows plants to convert light energy into chemical energy. Learners will explore the cell cycle and how it is regulated, and relate the loss of this regulation to the onset of cancer.

## **Unit 4: Descriptive Genetics**

Meiosis and Genetics of Organisms are covered in this unit. Learners explore sexual reproduction and how it contributes to genetic diversity, as well as explain the process and role of meiosis in sexual life cycles. Solving problems involving basic Mendelian genetics is covered in this unit. Learners explore gene-based and chromosomal inheritance and solve problems related to both.

## **Unit 5: Molecular Genetics**

Learners explore DNA and genes. Common environmental factors that cause mutations of cells, as well as the role of gene regulation upon cellular differentiation are covered. Learners perform a gel electrophoresis and analyze band structures while learning about gene splicing. Learners explore common methods of genetic engineering and some of their applications, including discussing both useful and potentially harmful aspects of genetic engineering technology.

## **Unit 6: Evolution**

Learners close the semester with a lab on population genetics and evolution. Learners compare and contrast the evolutionary theories of Darwin and Lamack. Gene frequencies are explored, and learners determine frequency of a dominant and recessive allele observed in a population. Learners describe factors in microevolution and adaptive evolution. Speciation, macroevolution, and phylogeny concepts are explored, and learners outline the history of evolution of life on Earth.

## **Biology –Semester B, Version 3.0 – *also available in vCourses***

### **Unit 1: Diversity of Life, Part 1**

Learners explain our modern system of biological taxonomy and how it is hierarchical in nature. Learners explore phylogeny and evolution, relating the branching pattern of phylogenetic trees to the taxonomic hierarchy and a cladistics analysis of a species evolution to branch points on its phylogenetic tree. Learners demonstrate their knowledge of the biology, diversity, evolution and importance of prokaryotes, the protozoa, algae, and fungi.

### **Unit 2: Diversity of Life, Part 2**

Building on Unit 1, learners continue to demonstrate knowledge of the biology, diversity, evolution, and importance of a variety of living things. Learners show how bryophytes are partially but not completely adapted to life on land and discuss the importance of vascular plants to life. Exploring both lower invertebrate and higher invertebrate animals, as well as chordates, learners discuss reasons for the overwhelming dominance of the arthropods on Earth.

### **Unit 3: Plant Structure and Function**

Exploring plant structure and function in this unit, learners identify and describe functions of angiosperms, leaves, stems, and roots. Completing the first lab of the semester – Transpiration – learners describe how materials necessary for plant metabolism are absorbed and transported by plants. Sexual and asexual methods of plant reproduction are explored, and learners describe hormonal and other behavioral responses of plants to their environment.

#### **Unit 4: Animal Structure and Function, Part 1**

Learners describe how an animal body is organized as represented by a mammal. Exploring the digestive system, circulatory and respiratory system, learners identify organs of each system while explaining the role of symbiotic bacteria, blood pressure, and velocity. A lab on physiology of the circulatory system is completed in this unit. Learners examine the immune system, explaining how long term immunity is established and maintained, as well as examine the excretory system, explaining how metabolic wastes are removed by the urinary system.

#### **Unit 5: Animal Structure and Function, Part 2**

In the second unit focused on Animal Structure and Function, learners explore the endocrine, nervous, and skeletal and muscular systems. Animal reproduction is covered, and learners will explain how hormonal controls in the mother initiate and complete the birth process. Learners describe the mechanism that a sperm uses to enter an egg, and describe the changes in the zygote as it undergoes embryological development.

#### **Unit 6: Ecology**

In the final unit of the course, learners explore ecosystems. Learners describe how energy flows through an ecosystem and describe the major biogeochemical cycles. As learners explore balance in nature, they discuss factors that determine community structure in ecosystems. Ecological Succession and its impact on environments are discussed, and learners discuss the major global ecological issues facing humanity today. Dissolved Oxygen and Aquatic Primary Production is the first lab of the unit. Animal behavior and how patterns affect adaptability in nature are explored in the second lab of the unit.

### **Advanced Biology – AP\* Edition, Semester A – *also available in vCourses***

#### **Unit 1: Nature of Life**

Learners begin the course applying the scientific method to scientific problems and laboratory investigations. Learners prepare for the semester's labs by learning how to safely use equipment such as Bunsen burners, graduated cylinders, microscopes, and balances, as well as being able to communicate result data through charts and graphs. Building a base of chemistry concepts and exploring water, acids bases, buffers, and carbon continue preparing learners for the course. Learners explore the six basic functional groups used to build the molecules of life.

#### **Unit 2: The Chemistry of the Cell**

This unit includes a lab on Enzyme Catalysis. Learners explore the synthesis and hydrolysis of polymers and describe how carbohydrates, lipids, proteins, and nucleic acids function in natural systems. Learners will recognize that energy transformation through metabolic pathways is a core process which defines life. Learners explain the structure, function, and denaturation of enzymes, while also discussing the "induced fit" hypothesis in enzyme action. Prokaryotic and eukaryotic cells are compared.

#### **Unit 3: Cell Structures and Functions**

Learners complete four labs in this unit – Diffusion and Osmosis, Cell Respiration, Plant Pigments and Photosynthesis, and Mitosis. Learners begin with an overview of cell structures and functions, and then explain how materials are transported in and out of cells. Learners discuss in detail how cells use organic compounds as their energy source and how photosynthesis allows plants to convert light energy into chemical energy. Learners will explore the cell cycle and how it is regulated, and relate the loss of this regulation to the onset of cancer.

#### **Unit 4: Descriptive Genetics**

Learners complete two labs in this unit – Meiosis and Genetics of Organisms. Learners explore sexual reproduction and how it contributes to genetic diversity, as well as explain the process and role of meiosis in sexual life cycles. Solving problems involving basic Mendelian genetics is covered in this unit. Learners explore gene-based and chromosomal inheritance and solve problems related to both.

### **Unit 5: Molecular Genetics**

Completing one lab in this unit – Molecular Biology – learners explore DNA and genes. Common environmental factors that cause mutations of cells, as well as the role of gene regulation upon cellular differentiation are covered. Learners perform a gel electrophoresis and analyze band structures while learning about gene splicing. Learners explore common methods of genetic engineering and some of their applications, including discussing both useful and potentially harmful aspects of genetic engineering technology.

### **Unit 6: Evolution**

Learners close the semester with a lab on population genetics and evolution. Learners compare and contrast the evolutionary theories of Darwin and Lamack. Gene frequencies are explored, and learners determine frequency of a dominant and recessive allele observed in a population. Learners describe factors in microevolution and adaptive evolution. Speciation, macroevolution, and phylogeny concepts are explored, and learners outline the history of evolution of life on Earth.

## **Advanced Biology – AP\* Edition, Semester B – *also available in vCourses***

### **Unit 1: Diversity of Life, Part 1**

Learners explain our modern system of biological taxonomy and how it is hierarchical in nature. Learners explore phylogeny and evolution, relating the branching pattern of phylogenetic trees to the taxonomic hierarchy and a cladistics analysis of a species evolution to branch points on its phylogenetic tree. Learners demonstrate their knowledge of the biology, diversity, evolution and importance of prokaryotes, the protozoa, algae, and fungi.

### **Unit 2: Diversity of Life, Part 2**

Building on Unit 1, learners continue to demonstrate knowledge of the biology, diversity, evolution, and importance of a variety of living things. Learners show how bryophytes are partially but not completely adapted to life on land and discuss the importance of vascular plants to life. Exploring both lower invertebrate and higher invertebrate animals, as well as chordates, learners discuss reasons for the overwhelming dominance of the arthropods on Earth.

### **Unit 3: Plant Structure and Function**

Exploring plant structure and function in this unit, learners identify and describe functions of angiosperms, leaves, stems, and roots. As they focus on growth in stems, learners use a cross section through an herbaceous dicot stem to identify tissue and relate it to secondary growth. Completing the first lab of the semester – Transpiration – learners describe how materials necessary for plant metabolism are absorbed and transported by plants. Sexual and asexual methods of plant reproduction are explored, and learners describe hormonal and other behavioral responses of plants to their environment.

### **Unit 4: Animal Structure and Function, Part 1**

Learners describe how an animal body is organized as represented by a mammal. Exploring the digestive system, circulatory and respiratory system, learners identify organs of each system while explaining the role of symbiotic bacteria, blood pressure, and velocity. A lab on physiology of the circulatory system is completed in this unit. Learners examine the immune system, explaining how long term immunity is established and maintained, as well as examine the excretory system, explaining how metabolic wastes are removed by the urinary system.

### **Unit 5: Animal Structure and Function, Part 2**

In the second unit focused on Animal Structure and Function, learners explore the endocrine, nervous, and skeletal and muscular systems. Animal reproduction is covered, and learners will explain how hormonal controls in the mother initiate and complete the birth process. Learners describe the stages occurring during animal development, and then explore the variation in development, describing the controls occurring during animal development and how differentiation is triggered.

## Unit 6: Ecology

In the final unit of the course, learners explore ecosystems. Learners describe how energy flows through an ecosystem, measure productivity and efficiency of an ecosystem, and describe the major biogeochemical cycles of an ecosystem. As learners explore balance in nature, they discuss factors that determine community structure in ecosystems. Ecological Succession and its impact on environments are discussed, and learners discuss the major global ecological issues facing humanity today. Dissolved Oxygen and Aquatic Primary Production is the first lab of the unit. Animal behavior and how patterns affect adaptability in nature are explored in the second lab of the unit.

## Chemistry –Semester A –revised winter 2010 – *also available in vCourses*

### Unit 1: Matter and Atomic Structure

This unit provides the conceptual understanding of what matter is and the structure of the atom. The unit begins by identifying the different types of matter and the properties of an element, compound, homogeneous mixture and heterogeneous mixture. It then explores how to identify key terms that indicate a physical or chemical property and change. The unit then follows the contributions made by Democritus, Dalton, Thompson, Rutherford, and Bohr and how their work led to the modern atomic theory. This information also includes the parts of the atom (protons, neutrons, and electrons) and their locations, charges, and masses. The unit concludes by describing the concept of isotopes and how to calculate average atomic mass from isotopic information.

### Unit 2: The Periodic table

This unit provides the basic understanding and application of the periodic table. It begins with an explanation that the modern periodic table is organized by increasing atomic number and how it can be used to either identify an element as a metal, nonmetal, or metalloid or predict properties of an element based on its location on the periodic table. It then goes on to explain how to write electron configurations and use the periodic table to relate an element's position to its configuration. This unit also explores how the periodic table can be used to identify and analyze the periodic trends in atomic and ionic size, ionization energy, and electronegativity. It also describes different types of electromagnetic radiation and how to calculate wavelength, frequency, and energy of light. It then concludes by explaining spectral lines for elements.

### Unit 3: Bonding

This unit introduces the concept of bonding between atoms. It begins by describing the octet rule for atoms and how it results in ionic, covalent, or metallic bonds. It then explains the rules for naming compounds and drawing Lewis dot structures for them. The unit explores the concept of electronegativity and uses it to determine if a bond formed between two atoms will be ionic, polar covalent, or nonpolar covalent. The unit also describes how to predict the three-dimensional bond shape of a molecule using the rules for VSEPR and determine if a molecule is polar or nonpolar based on the symmetry of its shape. It then concludes with understanding various intermolecular forces, such as London dispersion forces (LDF), dipole-dipole forces, and hydrogen bonding, and how these forces affect the melting and boiling point of a substance.

### Unit 4: The Mole Concept

This unit introduces the concept of mole. It applies the mole concept to calculate molar mass. It then goes on to explain how to calculate particles, mass, volume, and moles from a set of data as well as how to calculate percent composition. This unit concludes with how to determine the empirical formulas for a compound if its percent compositions or mass is given and how to determine its molecular formula if the molar mass and empirical formula is given.

### Unit 5: Chemical Reactions

This unit goes deeper into the concept of chemical reactions. It begins by explaining how to balance chemical reactions, identify different types of chemical reactions, and predict products for simple chemical reactions. It then goes on to describe how to determine mole ratios from balanced chemical equations, perform mole-to-mole stoichiometry problems, and calculate stoichiometry problems involving mass and volume. It then concludes by describing how to calculate percent yield for chemical reactions.

## Unit 6: Kinetic Molecular Theory and Gas Laws

In this unit, learners learn about the kinetic molecular theory and gas laws. This unit begins by describing the different forms of energy and the role of energy in chemical and physical processes, and by differentiating between endothermic and exothermic processes. It then covers the concept of kinetic theory and the comparison of the three states of matter based on this theory. This unit also introduces the heating curve and heat changes that occur during phase changes. Finally it develops the basic gas laws and their application: Boyle's law, Charles' law, Gay-Lussac's law, combined gas law, ideal gas law, Dalton's law, and Graham's law.

## Chemistry –Semester B –revised winter 2010– *also available in vCourses*

### Unit 1: Solutions

This unit explores the dissolving process, different types of solutions and calculations dealing with solutions. Learners will investigate colligative properties dealing with solutions. Real-world examples are used throughout this unit to provide context for student learning.

### Unit 2: Reaction Rates

In this unit, learners will explore deeper into the concept of chemical reactions. Previous units have introduced the topic, but learners will learn in this unit how to interpret reaction rates and identify factors that will change these rates. This unit also discusses what activation energy is and how it is related to chemical reactions, chemical equilibrium, Le'Chatelier's principle and rate laws.

### Unit 3: Acids and Bases

In this unit, learners will learn the properties of acids and bases and be able to identify and differentiate between the three types of acids and bases. Learners will be introduced to the pH concept and will be able to calculate pH for solutions. Strong and weak acids/bases will be introduced, and an analysis of  $K_a$  and  $K_b$  will be done. Finally, learners will understand that acids and bases react in neutralization reactions and a titration is a type of experiment used to determine unknown concentrations.

### Unit 4: Energy

This unit introduces the idea of entropy as a way to predict directions of reactions. Learners will calculate energy changes in chemical reactions through the use of thermochemical equations and then through calorimetry. The unit will use energy diagrams for reactions as a way of noting what each part represents and how to calculate important values such as activation energy. Learners will also learn how to calculate changes in enthalpy through Hess's law and with Gibbs free energy equation. By the end of the unit, learners will be able to predict the spontaneity of reactions based on Gibbs free energy equation.

### Unit 5: Oxidation-Reduction Reactions

In this unit, learners will learn how to identify oxidation and reduction reactions and how to balance them correctly. They will learn how these reactions are used in the real world in the form of voltaic and electrochemical cells. Learners will be introduced to calculations involving redox reactions and standard reduction potentials and finally how cell potentials are related to Gibbs free energy and the equilibrium constant.

### Unit 6: Nuclear Chemistry and Biochemistry

This unit reviews atomic structure, atomic mass and number and isotopes so that learners can understand the concepts of nuclear binding energy and the strong and weak nuclear forces. The unit then continues with an explanation of the three different types of nuclear decay and the products of this decay. Fusion and fission are then compared and the risks and benefits of nuclear processes are investigated. The unit then shifts towards organic chemistry with a lesson on hydrocarbons and the IUPAC organic molecule nomenclature. That lesson is followed by one on functional groups. The unit concludes with an examination of biologically important molecules.

## Advanced Chemistry – AP\* Edition, Semester A – also available in vCourses

### Unit 1: Matter and Atomic Structure

This unit is an introduction to chemistry and is organized around the concept of matter and atomic structure. It demonstrates that all matter can be categorized based on its composition. Learners will learn about composition, states, and changes of matter on the atomic level. They will explore the scientific contributions of atoms and how they vary based on the number of subatomic particles. The Separation by Chromatography lab is completed in this unit.

### Unit 2: The Periodic table

This unit is essential to the understanding of where the electrons are located in atomic orbitals. It explains the periodic trend for atomic and ionic size, ionization energy, and electronegativity. It explores electromagnetic radiation and how electrons can produce light as they release energy.

### Unit 3: Bonding

This unit is vital to the study of chemistry as it explains why and how atoms come together to form a bond, as well as the type of bonds they form. The unit explores both two- and three-dimensional shapes of compounds, which predict polarity. Real-world examples of compounds are used throughout the unit to allow learners to relate to the information being presented, such as H<sub>2</sub>O (water), NaCl (food additive), and NaF (toothpaste).

### Unit 4: The Mole Concept

In this unit, learners investigate the quantitative relationships that can be calculated using the chemical formula of a compound. It explores the concept of the mole, and how to figure out the number of particles, mass, volume, and composition of a sample. Learners will study conversions of moles, particles, mass, and volume for a given sample of a compound. Unit four includes a lab in which learners determine molar mass by freezing point depression.

### Unit 5: Chemical Reactions

This unit includes three labs: The determination of the formula of a compound, Separation and qualitative analysis of cations and anions, and Determination of mass and mole relationship in a chemical reaction. This unit discusses balancing, types, and products of chemical reactions. Learners will learn about chemical equations and stoichiometric relationships that can be determined from a balanced chemical equation. Learners will also calculate percent yield in this unit.

### Unit 6: Kinetic Molecular Theory and Gas Laws

This unit addresses the different types of energy involved in chemical reactions. An understanding of types of energy is necessary in order to differentiate between endothermic and exothermic reactions and how states of matter are determined. The unit will explain heating and cooling curves as they relate to phase changes. The unit concludes with information on gas law calculations, the ideal gas law and Dalton's and Graham's law. Learners complete two labs in Unit six: Determination of the molar volume of a gas; and Determination of molar mass by vapor density.

## Advanced Chemistry – AP\* Edition, Semester B – also available in vCourses

### Unit 1: Solutions

This unit explores the dissolving process, different types of solutions, and calculations dealing with solutions. Learners will investigate colligative properties dealing with solutions. Real-world examples are used throughout this unit to provide context for student learning.

## Unit 2: Reaction Rates

Learners complete one lab: Determination of the rate of a reaction and its order. In this unit, learners will explore the concept of chemical reactions more deeply. Previous units have introduced the topic, but learners will learn in this unit how to interpret reaction rates and identify factors that will change these rates. This unit also discusses activation energy, reaction rates, integrated rate equations reaction mechanisms, and factors that affect rate constants.

## Unit 3: Chemical Equilibrium

Learners complete a lab on the colorimetric analysis and determination of the equilibrium constant for a chemical reaction. Learners describe chemical equilibrium and write and evaluate equilibrium constant expressions. Learners convert between  $K_c$  and  $K_p$ . For a reaction not at equilibrium, learners calculate the reaction quotient,  $Q$ , and identify which way the reaction will go to reach equilibrium. Learners identify Le Chatelier's principle and explain how stressors affect chemical equilibrium.  $K_{sp}$  problems are performed, and learners predict which way equilibrium will shift with the addition of more salt or ions.

## Unit 4: Acids and Bases

Learners complete two labs in this unit: Determination of concentration by acid-base titration, including a weak acid or weak base; and Standardization of a solution using a primary standard. In this unit, learners will learn the properties of acids and bases and be able to identify and differentiate between the three types of acids and bases. Learners will be introduced to the pH concept and will be able to calculate pH for solutions. Strong and weak acids/bases will be introduced and an analysis of  $K_a$  and  $K_b$  will be done. Lastly, learners will understand that acids and bases react in neutralization reactions and a titration is a type of experiment used to determine unknown concentrations.

## Unit 5: Energy

In this unit, learners complete a lab on the Determination of enthalpy change associated with a reaction. This unit introduces the idea of entropy as a way to predict directions of reactions. Learners will calculate energy changes in chemical reactions through the use of thermochemical equations and then through calorimetry. The unit will use energy diagrams for reactions as a way of noting what each part represents and how to calculate important values such as activation energy. Learners will also learn how to calculate changes in enthalpy through Hess's law and with Gibbs free energy equation. By the end of the unit, learners will be able to predict the spontaneity of reactions based on Gibbs free energy equation.

## Unit 6: Oxidation-Reduction Reactions

In unit six, learners complete three labs: Determination of concentration by oxidation-reduction titration; Measurements using electrochemical cells and electroplating; and Synthesis of a coordination compound and its chemical analysis. In this unit, learners will learn how to identify oxidation and reduction reactions and how to balance them correctly. They will learn how these reactions are used in the real world in the form of voltaic and electrochemical cells. Learners will be introduced to calculations involving redox reactions and standard reduction potentials and finally how cell potentials are related to Gibbs free energy and the equilibrium constant.

## Unit 7: Nuclear Chemistry and Biochemistry

This unit reviews atomic structure, atomic mass and number, and isotopes so that nuclear binding energy and the strong and weak nuclear forces can be explained. It then continues with an explanation of the three different types of nuclear decay and the products of this decay. Fusion and fission are then compared, and the risks and benefits of nuclear processes are investigated. The unit then shifts toward organic chemistry and a lesson on biologically important molecules. IUPAC organic molecule nomenclature is then explained. The unit concludes with a lesson on functional groups.

[Life Science, Semester A – also available in vCourses](#)

## Unit 1: Scientific Inquiry

Learners explore a variety of components of investigations to ensure their understanding of the scientific method.

### **Unit 2: Cells: The Basis for Life**

Learners explore the definition of life and the chemistry of cells while comparing and contrasting cell types.

### **Unit 3: Structure and Function in Living Organisms**

Learners explore the levels of organization within an organism and the structure and function of an organism's components.

### **Unit 4: Classification and Diversity of Life**

Learners explore taxonomy of living organisms and the diversity within each classification.

## **Life Science, Semester B – also available in vCourses**

### **Unit 1: Genetics and Heredity**

Learners explore the role of DNA in respect to genes and traits, as well as heredity, genetic variation, and biotechnology.

### **Unit 2: Organisms and Their Environment**

Learners explore the flow of energy throughout their environment while observing the roles of biotic and abiotic factors.

### **Unit 3: Human Health and Reproduction**

Learners explore the factors that impact human health and a human's ability to reproduce.

### **Unit 4: Change Over Time**

Learners explore changes that have occurred in human history, observing the eras created by science to identify periods of time.

## **Physical Science, Semester A – also available in vCourses**

### **Unit 1: Properties and Structures of Matter**

Students are provided with opportunities to explore concepts related to the properties and structures of matter. Included are tutorials and applications where students can learn about and practice measuring matter, volume, density, force, atoms, elements, and compounds. Additionally, students will focus on identifying matter, states of matter, and the periodic table.

### **Unit 2: Chemistry Fundamentals**

In This unit, students will focus on chemistry fundamentals such as bonding and types of compounds, mixtures and solutions, chemical reactions, the scientific method, and controls and variables.

## **Physical Science, Semester B – also available in vCourses**

### **Unit 1: Energy and Its Applications**

In This unit, students will focus on energy and its applications, including the properties and sources of energy, heat, electricity, circuits, power consumption, magnetism, electromagnetism, and the properties and behavior of sound and light.

### **Unit 2: Forces and Motion**

In This unit, students will focus on concepts related to forces and motion including frame of reference, speed, and slope of a line, linear vs. non-linear data, Newton's Laws, types of forces, balanced and unbalanced forces, work and simple machines.

## Physics, Semester A – also available in vCourses

### Unit 1: Kinematics I

This unit provides an introduction to the study of physics. It begins with a timeline of the major discoveries and inventions in physics. The unit then explores real-world events and looks deeper into the study of motion. Next, it explores the mathematical concepts necessary for the study of physics and discusses how to perform basic mathematical operations on vector and scalar quantities using both scientific and standard notation. The unit also covers the kinematic terms and formulas used throughout physics and explains how to apply the knowledge of the relationships between time, velocity, displacement, and acceleration in one dimension. The unit concludes by discussing how to recognize relationships in data and by investigating the motion of objects along a straight-line path, relating displacement, velocity, and acceleration.

### Unit 2: Kinematics 2

In this unit, students analyze motion in two dimensions, starting with vector analysis, and then apply their knowledge of kinematics to problems in two dimensions. A major emphasis in this unit is the independence of perpendicular components of motion. This unit begins with vector analysis and the skills of adding and subtracting vector quantities as well as resolving a vector into its components. It explores relative velocity and analyzes motion in two dimensions in problems not involving gravity. It then describes the motion of projectiles launched horizontally in a uniform gravitational field, as well as those launched at an angle above the horizon when friction is negligible.

### Unit 3: Dynamics

This unit introduces the concept of dynamics and investigates motion with respect to the forces that cause it. It begins by describing the fundamental terms and concepts related to the study of dynamics: force, mass, inertia, weight, gravity, friction, and equilibrium. The unit proceeds to explain and apply Newton's first, second, and third laws of motion. It then describes the universal nature of gravity and explores the relationship between mass and weight. The unit concludes with dynamics used to analyze two-dimensional situations.

### Unit 4: Energy and Momentum

This unit introduces the concepts of energy and momentum. It begins by explaining how work is understood in terms of physics and how work relates to force and displacement. It proceeds by investigating kinetic energy, potential energy, and the transformation of one to the other. The unit analyzes the relationship between work and energy and the law of conservation of energy. It explains power, efficiency, and the concept of mechanical advantage for simple machines. The second half of the unit explores momentum, change in momentum (impulse), and conservation of momentum through examples, investigations, and problems. This unit concludes with how to solve problems involving elastic and inelastic collisions, in both one and two dimensions.

### Unit 5: Periodic Motion

This unit serves as an introduction to periodic motion and explores common cases of simple harmonic motion, including springs, pendulums, and circular motion. The unit begins by defining and describing periodic motion and applying that knowledge to a mass on a spring. It then analyzes the motion of a pendulum and explores simulations in which students will determine the factors that affect the period of a pendulum. The unit proceeds to describe the nature of circular motion and the centripetal force associated with it. The unit concludes by connecting circular motion and the law of universal gravitation, exploring the orbital process and solving problems related to period and velocity of bodies in circular orbit.

## Unit 6: Thermodynamics

In this unit, students are introduced to the fundamentals of thermodynamics, including the first and second laws of thermodynamics, heat, temperature, thermal equilibrium, and entropy. This unit begins by describing how the macroscopic properties of a thermodynamic system, especially temperature, are related to the molecular level of matter and discusses thermal energy as the sum of all the microscopic potential and kinetic energies. It then defines and discusses thermal equilibrium, specific heat, and latent heat, and focuses on how to use equations for specific heat, latent heat, temperature change and energy (gain/loss) to solve problems. Next, the unit explains the first law of thermodynamics and investigates the relationships among heat, work, and internal energy. It explores the concept of entropy and the second law of thermodynamics. It also examines heat engines and discusses how to determine their efficiency. The unit concludes with a global application of thermodynamic principles in the study of global warming.

## Physics, Semester B – also available in vCourses

### Unit 1: Waves

This unit serves as an introduction to waves. It begins by defining waves, and then classifying them as mechanical or electromagnetic waves, and as transverse or longitudinal waves. The unit then explores waves in terms of their fundamental characteristics of velocity, wavelength, frequency and amplitude. Next, it explains the use of the universal wave equation to solve problems involving speed, frequency, and wavelength. The unit also describes the reflection and interference of sound and light waves, the friction and diffraction of light waves, and the effects of resonance and Doppler shift, focusing on real world instances and applications. The unit concludes by describing how sound waves are produced, transmitted, and detected.

### Unit 2: Optics

This unit provides an overview of basic optics, including the electromagnetic spectrum and the properties of light, mirrors, and lenses. The unit begins by describing the electromagnetic spectrum and the concepts of reflection and refraction, relating them to light. It explores Snell's law, indices of refraction, and the quantitative analysis of refraction at a medium boundary. This unit also introduces analysis of ray diagrams for concave and convex lenses, as well as flat, concave, and convex mirrors. The unit concludes with an explanation of the polarization of light.

### Unit 3: Electrostatics

This unit introduces the concept of electrostatics, both qualitatively and quantitatively. The unit begins by describing the types of charges, the attraction and repulsion of charges, charge polarization, and induced charges. It then proceeds to explain Coulomb's law and its application to analyze electric forces. The unit then illustrates the electric field lines for one point charge, two point charges, and parallel plates, and explains how to calculate the electric field of a single point charge and of two point charges. The unit concludes by explaining how to calculate electric potential, electric potential energy, and change in electric potential energy.

### Unit 4: Circuitry

This unit introduces the basic concepts of electric circuits, which include applications of electrical energy in our everyday lives. It begins by explaining what conventional electric current is and how it is caused by a potential difference (voltage). It introduces and compares alternating current (AC) and direct current (DC). The unit then analyzes the physical characteristics that relate to electrical resistance and relates resistance, current, and voltage through Ohm's law. The unit goes on to analyze circuit diagrams and describe how to measure voltage and current in a circuit. It then explores and analyzes series, parallel, and combination circuits. The unit concludes with the relationship between electric power, electric potential difference, current, and resistance.

### **Unit 5: Magnetism**

This unit serves as an introduction to magnetism. It begins with the basic properties of magnets, including their interactions, field lines, and relationship to electricity. It then introduces the right-hand rules, enabling students to determine the direction of field lines and the magnetic forces on charges and current-carrying wires. The unit then describes magnetic induction and relates it to a change in magnetic flux. The unit concludes by defining Ampère's law and Faraday's law and explaining how these laws apply to electrical motors and generators.

### **Unit 6: Quantum and Nuclear Physics**

This unit introduces students to the fundamentals of the quantum model of light and the atom. It begins by describing the dual nature of light in that it behaves like both a particle and a wave. The unit then explains the strong nuclear force and how to calculate mass-energy equivalence by comparing it to the binding energy of the nucleus. Next, the unit explains the quantum model of the atom with its subatomic particles. It then explores the concept of naturally occurring radioactive isotopes and the ways that they decay. The unit concludes by describing nuclear fission and fusion.

## **Integrated Physics and Chemistry, Semester A – also available in vCourses**

### **Unit 1: Physics and Motion**

This unit provides an introduction to the study of physics. It begins with a timeline of the major discoveries and inventions in physics. The unit then explores real-world events and looks deeper into the study of motion. Next, it explores the mathematical concepts necessary for the study of physics and discusses how to perform basic mathematical operations on vector and scalar quantities using both scientific and standard notation. The unit also covers the kinematic terms and formulas used throughout physics and explains how to apply the knowledge of the relationships between time, velocity, displacement, and acceleration in one dimension. The unit concludes by discussing how to recognize relationships in data and by investigating the motion of objects along a straight-line path, relating displacement, velocity, and acceleration.

### **Unit 2: Newton's Law**

This unit introduces the concept of dynamics and investigates motion with respect to the forces that cause it. It begins by describing the fundamental terms and concepts related to the study of dynamics: force, mass, inertia, weight, gravity, friction, and equilibrium. The unit proceeds to explain and apply Newton's first, second, and third laws of motion. The unit concludes by describing the universal nature of gravity and exploring the relationship between mass and weight.

### **Unit 3: Energy and Momentum**

This unit introduces the concepts of energy and momentum. It begins by explaining how work is understood in terms of physics and how work relates to force and displacement. It proceeds by investigating kinetic energy, potential energy, and the transformation of one to the other. The unit analyzes the relationship between work and energy and the law of conservation of energy. The unit also explores periodic motion, such as motion of an elastic spring, a pendulum, and circular motion in terms of potential and kinetic energy. This unit concludes by explaining the concept of momentum and investigating the conservation of momentum through examples, investigations, and problems.

### **Unit 4: Waves**

This unit serves as an introduction to waves. It begins by defining waves and then classifying them as mechanical or electromagnetic waves, as well as transverse or longitudinal waves. The unit then explores waves in terms of their fundamental characteristics of velocity, wavelength, frequency, and amplitude. Next, it explains the use of the universal wave equation to solve problems involving speed, frequency, and wave length. The unit also describes how sound waves are transmitted, detected, and perceived. The unit then explains the concept of electromagnetic spectrum. It covers how to compare the frequencies and energies of various electromagnetic waves, including visible light. The unit concludes by describing reflection and refraction and relating them to light.

### **Unit 5: Electric and Magnetic Forces**

This unit introduces the fundamentals of electric and magnetic forces. The unit begins by describing the types of charges, the attraction and repulsion of charges, charge polarization, and induced charges. It then proceeds to explain Coulomb's law and its application to analyze electric forces. It then moves on to the basic properties of magnets, including their interactions, field lines, and relationship to electricity. It covers the right hand rules, enabling students to determine the direction of field lines and the magnetic forces on charges and current-carrying wires. The unit then concludes with magnetic induction and relates it to a change in magnetic flux.

### **Unit 6: Electric Circuits**

This unit introduces the basic concepts of electric circuits, which include applications of electrical energy in our everyday lives. It begins by explaining what conventional electric current is and how it is caused by a potential difference (voltage). It introduces and compares alternating current (AC) and direct current (DC). The unit then analyzes the physical characteristics that relate to electrical resistance and relates resistance, current, and voltage through Ohm's law. The unit goes on to analyze circuit diagrams and describe how to measure voltage and current in a circuit. The unit concludes with analyzing series, parallel, and combination circuits.

## **Integrated Physics and Chemistry, Semester B – also available in vCourses**

### **Unit 1: Matter and Atomic Structure**

This unit provides the conceptual understanding of matter and the structure of the atom. The unit begins by identifying the different types of matter and the properties of an element, compound, homogeneous mixture, and heterogeneous mixture. It then explores how to identify key terms that indicate a physical or chemical property and change. The unit then follows the contributions made by Democritus, Dalton, Thompson, Rutherford, and Bohr and discusses how their work led to modern atomic theory, including the basic components of the atom. The unit then describes the concept of isotopes and how to calculate average atomic mass from isotopic information. The unit explains the organization of the modern periodic table. It also explains how to write electron configurations and use the periodic table to relate an element's position to its configuration. This unit then concludes by exploring how the periodic table can be used to identify and analyze the periodic trends in atomic and ionic size, ionization energy, and electronegativity.

### **Unit 2: Chemical Bonding**

This unit introduces the concept of bonding between atoms. It begins by describing the octet rule for atoms and how it results in ionic, covalent, or metallic bonds. It then explains the rules for naming compounds and drawing Lewis dot structures for them. The unit explores the concept of electronegativity and uses it to determine if a bond formed between two atoms will be ionic, polar covalent, or nonpolar covalent. It then concludes by describing how to predict the three-dimensional bond shape of a molecule using the rules for VSEPR.

### **Unit 3: Chemical Reactions**

This unit introduces the concept of mole. It applies the mole concept to calculate molar mass. It then goes into the concept of chemical reactions, beginning by explaining how to balance chemical reactions, how to identify different types of chemical reactions, and how to predict products for simple chemical reactions. This unit also describes the properties of acids and bases and enables students to learn how to identify and understand the reaction process in oxidation and reduction reactions.

### **Unit 4: Kinetic Molecular Theory**

In this unit, students learn about the kinetic molecular theory. This unit begins by describing the different forms of energy and the role of energy in chemical and physical processes, and by differentiating between endothermic and exothermic processes. It then covers the concept of kinetic theory and the comparison of the three states of matter based on this theory. This unit concludes with the heating curve and heat changes that occur during phase changes.

### **Unit 5: Solutions and Reaction Rates**

This unit explores the dissolving process, different types of solutions and calculations dealing with solutions. Students will investigate colligative properties dealing with solutions. Real-world examples are used throughout this unit to provide context for student learning. In this unit, students will also explore the concept of chemical reactions more deeply. Students will learn how to interpret reaction rates and identify factors that will change these rates. This unit also discusses what activation energy is and how it is related to chemical reactions and reaction rates.

### **Unit 6: Thermal and Nuclear Energy**

In this unit, students are introduced to basic concepts of both thermal and nuclear energy. The unit begins by describing how the macroscopic properties of a thermodynamic system, especially temperature, are related to the molecular level of matter. It goes on to discuss thermal energy as the sum of all the microscopic potential and kinetic energies. It then defines and discusses specific heat and latent heat and focuses on how to use equations for specific heat, latent heat, temperature change, and energy (gain/loss) to solve problems. Next, the unit explains the global application of thermodynamic principles, especially in the study of global warming.

This unit also reviews atomic structure, atomic mass and number, and isotopes so that students can understand the concepts of nuclear binding energy and the strong and weak nuclear forces. It then continues with an explanation of the three different types of nuclear decay and the products of this decay. The unit concludes with a comparison of fusion and fission, and the risks and benefits of nuclear processes are investigated.

## **Earth and Space Science, Semester A – also available in vCourses**

### **Unit 1: Looking at Earth's Features**

This unit presents core concepts that students will draw from throughout the rest of the course. The unit begins by distinguishing the layers of the earth, both above and below the crust, by both composition and characteristics. It covers how these layers interact with each other to varying degrees. The unit then introduces various types of landforms and how they are created and destroyed by earth processes. Information about maps is also presented, including types of maps, how to read each type of map, and which maps might best be used in certain situations.

### **Unit 2: The Energetic Earth**

This unit introduces plate tectonic theory, focusing on how Earth's moving plates play a role in the creation of landforms. It covers how earthquakes occur, how they are measured, and how preparation can prevent damage and injuries. The unit also discusses types of volcanoes, the forms of lava they produce, and how the type of eruption depends on the gases and magma within a volcano.

### **Unit 3: Rocks and Soil**

This unit defines minerals and rocks, describes the types of minerals commonly found on Earth, and explains how to distinguish between types of rocks and minerals based on their characteristics. It also explains how one type of rock can change into another over time. The unit discusses the role that erosion and weathering play in creating different types of soil and how these actions affect soil fertility. The different layers of soil and their formation are also covered in this unit.

## **Earth and Space Science, Semester B – also available in vCourses**

### **Unit 1: Water in Our World**

This unit discusses how the water cycle works and describes the movement of water, including wave action and the role of currents and tides in the ocean. This unit examines the layers of the ocean, zones of marine life, the features of the ocean floor, and how the depth of the ocean affects its temperature and salinity. Finally, this unit addresses the importance of fresh water for life on Earth, where fresh water is found, and what forms it takes. This discussion includes the impact of pollution and conservation on Earth's water resources.

## Unit 2: Weather and Atmospheric Processes

This unit examines the layers of the atmosphere and the makeup and attributes of each layer. It discusses wind and how it is produced, based on the rotation of Earth and heat from the sun. The effects of pollution on the atmosphere are also covered. The unit addresses how weather is formed, different types of weather, and how certain conditions can lead to storms and other weather events. Weather maps and their symbols are covered. The unit wraps up by discussing the differences between weather and climate zones. Examples of climate zones and biomes found with these zones are included. The topic of global warming and its possible effects on Earth are also addressed.

## Unit 3: Earth, Space, and the Universe

This unit discusses the inner and outer planets, including their makeup, physical attributes, and orbits. Current and past theories about the place our solar system has in the universe are presented. The unit also covers ways the sun, moon, and Earth interact, such as eclipses and the pull of tides. The layers and physical qualities of the sun and moon are presented. The change of seasons is described in terms of Earth's tilt and orbit around the sun. This unit also examines the life cycle of a star, how a star's size and distance from Earth is determined, and the tools used to study stars. The locations of stars in the sky and how they appear to move nightly and by season is covered. The unit also describes the size, shape, and movement of galaxies.

# Social Studies

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## Basic American History 1, Semester A

### Unit 1: A Meeting of Cultures: Europe and America

Early People Lay Foundation of American Culture (before 1492) Prehistoric Peoples Migrate Across the Earth: The First Americans Establish Diverse Cultures; Cultures Outside the Americas, Spain Leads in Exploring and Colonizing New World (1492–1650) The Search for Trade Routes Leads to the Discovery of America; Spain Establishes Colonies in the New World; England, France, Holland, and Sweden Colonize North America

### Unit 2: The American Colonies: 1607–1750

The English Establish Thirteen Colonies in America (1607–1732) England Is Eager to Start Colonies in the New World; Thirteen Colonies Are Founded, Colonial Life Brings Social Change to America (1607–1750) Colonists Gain a Voice in Colonial Government; Religion, Education, and Social Classes in the Colonies; Geography Affected Economic Life in the New England, Middle, and Southern Colonies; Native Americans and Enslaved Africans Suffer during the Colonial Period

### Unit 3: The Road to Revolution and Independence: 1651–1783

British Laws Anger the Colonists (1651–1775) England Tries to Control Colonial Trade by Passing the Navigation Acts; The French and Indian War Results in More Controls on the Colonies; Colonists Protest against British Controls; New British Taxes and Actions Increase Colonial Anger: The Road to War Patriots Win their War for Independence (1776–1783) The Second Continental Congress Meets; Colonists Move toward Independence; Patriots Battle Loyalists; After Overcoming Difficulties, Patriots Win Their War for Independence

### Unit 4: From Confederation to Nation: 1776–1788

Americans Begin to Govern Themselves (1776–1787) Americans Create State Constitutions and Governments: The Articles of Confederation; Congress Organizes the Western Territories; Congress Has Difficulty Solving Problems at Home and Abroad; Some Americans Demand a Stronger National Government Americans Create the U.S. Constitution (1787–1788) Congress Calls for a Constitutional Convention: The Convention Solves Problems through Compromise; After Heated Debate, the States Ratify the U.S. Constitution

## Basic American History 1, Semester B

### Unit 1: The Emergence of a Nation (1789–1824)

Washington and Federalists Lead the New Nation (1789–1801)

A New Government Is Organized; Led by Treasury Secretary Hamilton, the New Government Strengthens the Nation's Money System; Some Americans Oppose the Government's Financial Policies; The United States Stays Out of Foreign Wars; Arguments Lead to the Rise of Political Parties; President Adams' Policies Anger Democratic-Republicans: The Election of 1800—A Peaceful Revolution, America Begins to Grow and Gain Respect Abroad (1801–1824) Democratic-Republicans Change Some, but Not All, Federalist Policies: The United States Acquires Louisiana; Conflicts with Great Britain Lead to the War of 1812: The U.S. Acquires Spanish Florida and Issues the Monroe Doctrine: The American Economy and Culture Begins to Change and Grow

### Unit 2: America Grows and Changes (1825–1853)

Conflicts Divide Americans during Age of Jackson (1825–1841)

The Election of 1824 Renews Old Conflicts; Andrew Jackson Wins the Presidency in 1828; A Growing Spirit of Democracy Sweeps the Nation; Native Americans Lose Their Lands in the East; The Tariff Issue Threatens to Tear Apart the Nation; Even after Retirement, Jackson's Ideas Continue to Influence America  
Americans Move toward the Pacific (1803–1853) American Settlers Move into Oregon Country; The United States Acquires the Southern Part of Oregon; After Gaining Its Independence, Texas Becomes a Part of the United States: The Mexican War Leads to Further United States Expansion in the West

### Unit 3: Increasing Strife Leads to War (1830–1861)

North and South Become Increasingly Different (1830–1850) The North Is First to Become Industrialized; Industrial Growth Changes American Society; Cotton and Slavery Become Increasingly Important in the South: The Movement to End Slavery Gains Strength; Reformers Tried to Solve Other Problems during the Early to Mid-1800s Sectional Anger Splits the Union Apart (1850–1861) Sectional Differences Threaten American Unity during the Early Years of the Republic: The Compromise of 1850 Fails to Calm Growing Anger between Southerners and Northerners; Bitter Arguments over the Spread of Slavery into Western Territories Increase Sectional Anger; Abraham Lincoln Is Elected President and the Southern States Secede from (Leave) the Union

### Unit 4: Civil War and Reconstruction (1861–1877)

North and South Fight a Civil War (1861–1865)

Southerners Attack Fort Sumter; the Civil War Begins; Both North and South Have Advantages and Disadvantages; Early Confederate Victories Cause Northern Morale to Decline; The Tide of Battle Begins to Change with Union Victories at Sea and in the West; Lincoln Takes a Major Step toward Abolishing Slavery—The Emancipation Proclamation; General Grant Leads the Union to Victory; President Lincoln, the Preserver of the Union, Is Assassinated Reconstruction: Blacks Gain, but then Lose Rights (1865–1877) The Lincoln-Johnson Plan of Reconstruction Is Opposed by Radical Republicans; President Johnson Is Impeached; After Bringing Temporary Benefits to Blacks, Reconstruction Ends in 1877; Southern States Once Again Discriminate against Blacks; Sharecropping, Instead of Slavery, Becomes an Important Part of the South's Economy

## Basic American History 2, Semester A

### Unit 1: A Nation Growing: 1865–1900

Indian Way of Life Ends as the West Is Settled (1865–1890) White America Pushes into Indian Lands in the West; Western Indians Are Defeated and Put on Reservations; Cattlemen and Farmers Settle the West  
America Becomes a Great Industrial Nation (1865–1900) Captains of Industry Lead America into an Industrial Age; Corporations Become an Important Part of America's Industrial Growth

## Unit 2: A Changing America: 1865–1920

America Faces Problems as It Industrializes (1865–1900) Industrial Workers Face Hardships; Industrial Workers Form Labor Unions but They Find It Difficult to Win Better Wages and Working Conditions; Farmers Also Face Difficulties America Becomes a More Diverse & Urban Society (1865–1900) Industrial Growth Leads to a Wider Gap between the Rich and the Poor; Immigration Makes America's Population More Diverse; Industrialization Results in Rapid Urban Growth Reformers Try to Solve Problems (1883–1920) Progressive Political Reforms Make America More Democratic; Progressive Economic Reforms Curb Harmful Business Practices; Theodore Roosevelt and Woodrow Wilson Are Strong Progressive Presidents

## Unit 3: Emergence as a World Power: mid 1800s–1918

America Acquires Overseas Possessions (mid 1800s–1914) During the Late 1800s, Some Americans Urge Overseas Expansion; The Spanish-American War Makes the U.S. into a World Power; The U.S. Acquires the Panama Canal Zone; The U.S. Becomes Increasingly Involved in Latin American Affairs U.S. Neutrality, then Involvement in World War I (1914–1918) World War I Begins; The United States Declares Its Neutrality; The United States Enters World War I; Wilson Helps Write the Treaty of Versailles but the U.S. Senate Rejects Membership in the League of Nations

## Unit 4: Boom, Bust, and Recovery: 1920–1941

American Cultural Experience during the Twenties (1920–1929) The Roaring Twenties: A Time of Wonderful Nonsense; Government Favors a Return to Laissez-Faire Economics during the Twenties; American Society Changes during the Roaring 20s; Intolerance-The Dark Side of the Roaring 20s, America Struggles to End the Great Depression (1929–1941) Economic Warning Signs during the Boom of the 1920s; The Stock Market Crashes and America Plunges into a Deep Recession; President Hoover Is Slow to Respond to the Depression; F.D.R. Is Elected President and His New Deal Program Begins to Pull the U.S. Out of the Depression; Despite Harsh Criticism of Roosevelt's New Deal, Most Americans Support it.

## Basic American History 2, Semester B

### Unit 1: Response to World Threats: 1919–1945

U.S. Neutrality, Then Involvement in World War II (1919–1945)

During the 1920s and 1930s, Dictators Rise to Power; Japan, Italy, and Germany Begin Wars of Aggression—World War II Begins; When World War II Begins, the U.S. at First Declares Its Neutrality but Slowly Begins to Give Support to the Allies; The U.S. Joins the Allies and Helps Defeat the Axis Powers; Plans for a Post-War Peace

### Unit 2: The Postwar Era: 1945–1960s

America Becomes the Leader of the Free World (1945–1953)

The United Nations Is Created-The U.S. Becomes a Member: The Cold War Begins; A New "Red Scare" Disrupts America: The Cold War Turns Hot in Asia: Communists Gain Control of China but the U.N. Stops Their Invasion of South Korea: The "Freedom Explosion" Presents the U.S. with New Challenges Post-War Prosperity and Civil Rights Movement (1945–1960s) America Faces Difficulties as it Changes from a Wartime to a Peacetime Economy; Developments during the Late 1940s and 1950s Encourage Economic Growth and Change American Life; President Eisenhower's Policies Encourage Economic Growth during the 1950s; African-Americans Continue to Face Discrimination during the Post-World War II Years; In a Landmark Case, "Brown v. the Board of Education," the Supreme Court Begins to Strike Down Segregation; Rosa Parks and Martin Luther King, Jr. Start a New Phase in the Civil Rights Movement

### Unit 3: Turbulent Times: 1961–1981

Domestic Problems during Kennedy-Johnson Years (1961–1969) President Kennedy's Efforts to Solve Some of America's Problems Are Cut Short by an Assassin's Bullet; President Johnson's "Great Society" Program Makes Kennedy's Civil Rights Goals a Reality; Congress Makes Johnson's "War on Poverty" into Law; The Modern Environmental Movement and the Women's Rights Movement Begin; The Black-Power Movement Gains Strength in America's Cities; Opposition to the War in Vietnam Leads to Social Change: The Year 1968 Symbolizes the Problems that Plagued the 1960s

#### **Unit 4: New Challenges in a New World Order: 1981–Present**

Cold War Ends, but Domestic Problems Continue (1981–1993), The Reagan Economic “Revolution” Is a Shift Back toward Traditional Free-Market Capitalism; Reaganomics Has Both Good and Bad Results; Reagan’s Foreign Policy Is Aimed at Halting the Spread of Communism; Developments in the Soviet Union Lead to Improved Relations between the U.S. and U.S.S.R.; President Bush Carries Forth Reagan’s Foreign Policies-The Cold War Comes to an End; President Bush Provides Leadership as the United Nations Turns Back Iraqi Aggression in the Middle East; President Bush’s Domestic Problems Lead to His Defeat in the Presidential Election of 1992

### **American History 1, Semester A – also available in vCourses**

#### **Unit 1: People of the Old and Pre-Columbian Worlds (before 1492)**

Beginning with prehistoric peoples and continuing through to the Renaissance and the Protestant Reformation, this interactive study guide provides students an easy-to-use, comprehensive, chronological coverage of pre-American history. Included are related primary documents, maps, charts and graphs, and art.

#### **Unit 2: 1492–1763**

Beginning with European exploration and discovery, and continuing through to the settling of North America, this interactive study guide provides students an easy-to-use, comprehensive, chronological coverage of United States history. Included are related primary documents, maps, charts and graphs, and art.

#### **Unit 3: 1763–1783**

Beginning with the French and Indian War, and continuing through to the end of the Revolutionary War and the creation of the Articles of the Confederation, this interactive study guide provides students an easy-to-use, comprehensive, chronological coverage of United States history. Included are related primary documents, maps, charts and graphs, and art.

#### **Unit 4: 1783–1789**

Beginning with the Constitutional Convention of 1787, and continuing through to a discussion about the meaning of the Constitution, this interactive study guide provides students an easy-to-use, comprehensive, chronological coverage of United States history. Included are related primary documents, maps, charts and graphs, and art.

### **American History 1, Semester B – also available in vCourses**

#### **Unit 1: 1789–1841: Political Change**

Beginning with the presidency of George Washington, and continuing through to the presidency of Andrew Jackson, This unit provides learners an easy-to-use, comprehensive, chronological coverage of the political change in the United States. Included are related primary documents, maps, charts and graphs, and art.

#### **Unit 2: 1800–1860: Cultural and Social Change**

Beginning with the presidency of George Washington, and continuing through to the election of Abraham Lincoln to the presidency. This unit provides learners an easy-to-use, comprehensive, chronological coverage of the cultural and social change in the United States. Included are related primary documents, maps, charts and graphs, and art.

### Unit 3: 1861–1877

Beginning with the Southern secession, and continuing through to the end of Reconstruction, this interactive study guide provides learners an easy-to-use, comprehensive, chronological coverage of United States history. Included are related primary documents, maps, charts and graphs, and art.

## American History 2, Semester A – *also available in vCourses*

### Unit 1: A Nation Growing (1865–1914)

The Western Frontier Is Settled (1865–1890)

America's Expansion; Western Settlement; Law and Order in the West; Political Organization of the West; The Mining Frontier and Gold Rushes; Native Americans: The "Trail of Tears"; Development of Reservations; Broken Agreements and Armed Conflict; The Ghost Dance; The American Bison; The Dawes Severalty Act; Transportation and Communication in the West; The Growth of the Railroad; The Pony Express and the Telegraph; The Growth of Farming in the West; Western Farmers and Railroad Expansion; Western Farmers and Favorable Government Policies: The Growth of the Cattle Industry; Farm Life: The Granger Movement; Populism; The Last Frontier Industrializing America (1865–1914) Factors that Contributed to Economic Transformation; Natural Resources and Labor: The Role of Ideology—Republicanism and Liberalism; Social Darwinism and the Self-Made American; Patents; Inventions; Manufacturing Innovations: The Role of Government Policy—Government Subsidies and Tariffs; The Public Corporation; Pools, Trusts, and Holding Companies; Vertically and Horizontally Integrated Combinations; The Growth of the Labor Movement; National Labor Union; Knights of Labor; American Federation of Labor; The Beginning of Government Regulation of Business; Federal Laws; Conflicts between Labor and Management; Important Labor Strikes; The Pullman Strike (1894); Anti-Union Tactics; Effects of Industrialization

### Unit 2: A Changing America (1870–1920)

The Politics of the Gilded Age (1870–1900)

Political Participation and Party Politics; Political Parties; National Political Tactics; Differences between the Republican and Democratic Parties; Overlap between the Republican and Democratic Parties; Internal Differences within the Republican Party; Internal Differences within the Democratic Party; Sectional Influence on Major Political Issues; Corruption, Scandals, and Civil Service Reform; Corruption; Scandals; The Pendleton Civil Service Act; Economic Issues; Tariffs; The Democratic-Republican Debate over Tariffs; Higher Tariffs Win Out; Monetary Policy; "Sound" versus "Soft" Money; Silver Coinage; Rise of Populism; Formation of the National Populist Party; Results of the Election of 1892; Silver and the Election of 1896; Enduring Influence of the Populist Party, The Making of Urban America (1877–1920) Internal Migration; Rural Migration; Black Rural-to-Urban Migration; The Tide of Immigrants; The Old and the New Immigration; Entering America; Immigrant Culture; Assimilation; Nativism; Anti-Immigration Groups; Anti-Asian Sentiment and the Chinese Exclusion Act; Other Significant Immigration Laws and Measures; City Life; Inner Cities and Suburbs; Increasingly Crowded Cities; Other Urban Problems; Urban Leisure; Commercialized Leisure; Modern Cities for a Modern Nation, Progressive Era (1890–1920) Who Was a Progressive? – Muckrakers; Social Reform; Social Gospel Movement; Purity Crusades; The Temperance Movement; Other Purity Campaigns; Women and the Vote: The Status of African-Americans; Economic and Political Reform; Reform at the Local Level; Reform at the State Level; Reform at the Federal Level; Theodore Roosevelt; Roosevelt and the Trusts; Roosevelt and Labor; Roosevelt and Conservation; William Howard Taft; Election of 1912; Woodrow Wilson; Tariffs and Income Taxes; The Legacy of Progressivism

### Unit 3: Emergence as a World Power (mid 1800s–1918)

U.S. Involvement in the Pacific/Latin America (mid 1800s–1914)

The First American Overseas Ventures; China; Japan; Other Pacific Areas; Spanish-American War; Significance of the Spanish-American War; Supporters of U.S. Expansion; Opponents of U.S. Expansion; U.S. Pursues an Expansionist Policy; Effects of the Treaty: Puerto Rico, Cuba, and Guam; Effects of the Treaty: The Philippines; The Panama Canal; The Roosevelt Corollary to the Monroe Doctrine; Events in Asia; Japan; China; Anti-Asian Sentiment in the U.S.; The Mexican Revolution: An Imperial Power

America Becomes Involved in World War I (1914–1918) The Roots of World War I; War Erupts; The U.S. Tries to Remain Neutral; America’s Neutrality Is Difficult; Wilson Is Re-Elected; World War I; Stalemate on the Western Front; The U.S. Enters the War; Problems on the Eastern Front; The Allies Intervene in Russia; American Troops in Europe; The Home Front; The Fourteen Points; The Armistice; The Treaty of Versailles; Negotiations; Terms; The Fate of the Treaty in the U.S. Senate; The Consequences of World War I

#### **Unit 4: Boom, Bust, and Recovery (1920–1941)**

America Changes during the Roaring 20s (1920–1929) Unrest in 1919; Racial Conflict; Labor Strikes; Red Scare; Politics of the 1920s; Civil Rights are Expanded; Labor, Industry, and Agriculture in the 1920s; Recession and Followed by Economic Boom; Industrial Expansion; Favorable Government Policies; Labor, Welfare Capitalism, and the American Plan; Farming in the 1920s; America Changed in the 1920s; Mass Culture; Consumerism: The New Morality: The Lost Generation and the Harlem Renaissance; Reactions to the Changes: The Scopes Trial; Prohibition; Intolerant America; Immigration Restrictions; The New Ku Klux Klan; The “Whispering Campaign” of 1928; Sacco-Vanzetti Trial, Great Depression and New Deal (1929–1941) The Impact of the Great Crash: The Impact on the U.S. Economy: The Impact on Personal Life; Herbert Hoover’s Actions; The New Deal; The Three “R”s; Relief; Recovery; Reform; Native Americans and African Americans under the New Deal; Reviving Global Trade; Roosevelt and His Critics; The Economy Turns Sour Again; The Effects and Heritage of the New Deal

### **American History 2, Semester B – also available in vCourses**

#### **Unit 1: Response to World Threats: 1919–1945**

U.S. Foreign Policy between the Two World Wars (1919–1941) – Introduction: The Debt Problem; U.S. Economic Expansion; U.S. Tariff Policy: The Washington Naval Conference and the Kellogg-Briand Pact; Beyond the “Big Stick”: U.S.-Latin American Relations; Germany and Italy: The Quest for Control of Europe: The U.S. Response to Hitler: Isolationism and Neutrality; Japan: The Greater East Asia Co-Prosperity Sphere: The Sleeping Giant: Awakens World War II and the Post-War Peace (1939–1945) The Fighting in Europe Begins; Bombing of Great Britain; U.S. Lend-Lease Act; Invasion of the Soviet Union; Pearl Harbor: The United States Enters World War II: The American Economy; Rationing; Revenue Act and War Bonds; End of the Great Depression; Labor Management Issues; New Patterns of Employment; Mexican Workers; Women in the Workforce; Population Movements; African-Americans Move from South to North; Defeating Germany; Fighting in the Soviet Union; Invasion of North Africa and Italy; A Second Front in Western Europe, D-Day; Germany Surrenders; The Holocaust; Midway: The Tide of War Turns in the Pacific; Island Hopping; The War in China; The War in Asia Comes to an End; The Japanese Islands Are Bombed; U.S. Demands Unconditional Surrender; The Potsdam Declaration; Dropping of the Atomic Bombs; The Japanese Surrender; Planning for the Post-War World; The Atlantic Charter; Bretton Woods and Dumbarton Oaks Conferences; Yalta Conference; Costs of the War

#### **Unit 2: The Postwar Era: 1945–1961**

Cold War and the Truman Years (1945–1953), Transition to a Peacetime Economy; Fair Deal; Taft-Hartley Act; Changing Lifestyles; Truman and the 1948 Election; Cold War Politics; Cold War Economics; Containment and the Truman Doctrine: The Berlin Blockade and the Formation of NATO; The “Loss” of China; Occupation of Japan; The Korean War; Implications of the Korean War; Fighting Communism at Home The Eisenhower Years (1953–1961) American Voters Seek Change; Modern Republicanism and Eisenhower’s Economic Policies; American Culture in the 1950s; The Civil Rights Movement; Eisenhower’s Foreign Policy and the Cold War; U.S. Concerns about the Soviet Union; The Election of 1960

#### **Unit 3: Turbulent Times: 1961–1981**

Vietnam and the Great Society in the Kennedy-Johnson Years (1961–1969) Kennedy and Domestic Liberalism; Kennedy’s Economic Policies; Kennedy and Civil Rights; Kennedy and “Flexible Response”; Kennedy and Cuba; Kennedy and the Berlin Crisis; Kennedy and South Vietnam; Kennedy and the Space Program; Lyndon Johnson and Civil Rights; The Election of 1964; Lyndon Johnson and the Great Society; Cultural Upheaval in the 1960s; A Divided America; Lyndon Johnson and Vietnam; The Election of 1968, The Nixon, Ford, and Carter Years (1969–1981) Richard Nixon and the Search for Peace Abroad and at Home: The War Abroad and Chaos at Home Both Continue; Richard Nixon Seeks to Reshape U.S. Global Strategies; Domestic Policies in the Nixon Years; Nixon and Civil Rights; Nixon and the Economy; Nixon and

the Election of 1972; Nixon and the Watergate Scandal; The White House Horrors; Nixon Is Forced from Office; Gerald Ford Assumes the Presidency; Ford and the Economy; Ford and Foreign Affairs; The Election of 1976; Jimmy Carter Assumes the Presidency; Carter, the Energy Crisis, and the Economy; Carter and Human Rights; Carter and the Middle East; Carter, the Soviet Union, and China; Carter and Latin America; Carter and Iran; The Election of 1980

#### **Unit 4: New Challenges in a New World Order: 1981–Present**

Cold War Ends, Conservatives Rise in the Reagan-Bush Years (1981–1993

Reagan Takes Office; Reagan’s Economic Policies; Results of “Reaganomics”; Continuing Economic Problems; Reagan’s Domestic Policies; Reagan’s Foreign Policy; The Strategic Defense Initiative (SDI); Overtures to the Soviet Union; Reagan, Latin America, and the Middle East: The Election of 1984; Reagan and the Iran-Contra Scandal: The Election of 1988; Bush and Domestic Policy; Bush and Latin America; The End of the Cold War; George Bush and the Gulf War: The Election of 1992

Prosperity, then Terrorism in the Clinton-Bush Years (1993–Present

The 1992 Election; William J. Clinton Becomes the 42nd President; Clinton’s Domestic Policy; Republicans Gain Control of Congress in the 1994 Elections; Clinton and the Republican Congress; Clinton’s Foreign Policy; The Election of 1996; Clinton’s Second Term; Scandals, Impeachment, and the Congressional Elections of 1998; Foreign Policy in Clinton’s Second Term; The 2000 Election; George W. Bush Becomes the 43rd President; Bush’s Initial Policies; Terrorism in America; America’s Military Response to September 11th; Domestic Reactions to Terrorism; Reassessing American Foreign Policy; Bush’s Remaining First Term; Foreign Policy and Events; The Iraqi War and Its Aftermath; Constructing a New Iraqi Government; Other Foreign Policy Developments; Domestic Policy and Events; Congressional Actions; The 2004 Election

### **Advanced History – AP\* Edition, Semester A – also available in vCourses**

#### **Unit 1: The Historical Process**

This unit focuses on the process of understanding history as a subject. It provides a framework for understanding history from a topical and a periodization standpoint and discusses how dividing history into specific periods can aid in studying trends, continuity, and changes across time. The unit begins by explaining how reading and writing skills are essential to the study of history and goes on to outline the importance of essays and other resources, such as charts and maps, the different methods that historians have used to gather evidence, and various ways to interpret and evaluate different sources. Sources are also categorized and the importance of each is discussed. Various perspectives in interpreting history are also studied, including traditional, revisionist, top-down and bottom-up perspectives. Students also learn why historical events are studied, restudied, and evaluated across time, and how American historical events are relevant to current events in the nation and across the world.

#### **Unit 2: Early America**

This unit introduces and analyzes indigenous American civilizations, their cultural and political achievements before the Europeans arrived in the Americas, such as early democracy and the engineering of Tenochtitlan. Students also learn about American Indian cultures of the fifteenth and sixteenth centuries, such as the Aztecs and Incas, and their early interactions with Europeans, including the role played by religion, disease, and weaponry. This unit looks at the establishment of Spanish, French, and English colonies in the Americas, and how trade and religion influenced the interactions between the Europeans and the native peoples. It compares the Jamestown and Plymouth colonies, and the gradual establishment of the thirteen British colonies, their individual cultural and political identities, and their relationship with Great Britain. Students also learn about triangular trade, the economic and social structures and trade between the colonies and Britain, and immigration to the colonies. This unit also looks at the growth of a plantation economy and the role of cash crops in the southern colonies that brought slavery and class structures to the colonies in the eighteenth century. The unit concludes with an analysis and comparison of the Enlightenment and the Great Awakening, each movement’s roots, principles, and thinkers, and how each movement influenced the colonies in the mid-eighteenth century, particularly in terms of religious and political thought.

### **Unit 3: Revolutionary America and the New Republic**

This unit discusses the French and Indian war and how this war laid the foundation for colonial demands for independence. Students learn about the European roots of this war, the Albany conference, the war's impact on the relationship between France and Britain, and on Britain's economy. This unit goes on to examine the events that led to the American colonists demanding independence from Britain, such as the Stamp Tax, the Townshend Duties, and the Intolerable Acts, and how these events led to the establishment of the Continental Congress and the Committees of Correspondence, and how different classes and geographical groups reacted to British taxes and policies in the colonies. Students also learn about the Boston Massacre, the Boston Tea Party, the declaration of war, and America's Declaration of Independence, the major battles of the Revolutionary War, France's aid, foreign intervention, and the colonists' eventual victory and secession from Britain. This unit proceeds to analyze the Articles of Confederation that evolved into the Constitutional Convention, the debates between Federalists and Anti-Federalists, the US Constitution, and the Bill of Rights. Students learn about George Washington's presidency, the establishment of the powers of the president, his department heads, and key legislation of his administration. This unit also analyzes the establishment of political parties, how Washington's decision to step down after two terms set a precedent in American politics, his Farewell Address and Neutrality Proclamation. It compares the Democratic-Republic Party led by Thomas Jefferson and the Federalist Party led by Alexander Hamilton and John Adams, and analyzes Federalism, and the presidencies of Adams and Jefferson. This unit covers early westward expansion of the United States, such as the Louisiana Purchase, as well as why Americans chose to move west. Hostilities between American settlers and American Indians, and violence toward and oppression of the native tribes are also covered. The unit concludes with the circumstances that led to the renewed conflict with Britain, such as British interference with neutral trade during the Napoleonic Wars, which resulted in the War of 1812, the major battles of the war, and the legacies of the Battle of New Orleans and the Treaty of Ghent.

### **Unit 4: An Era of Transformations**

In this unit, students learn about industrialization in and immigration to the northern states in the early nineteenth century, theories of capitalism and the emergence of a free market-based economy, immigration trends, and nativism. This unit also lists the inventions that made the cotton industry central to the southern economy, and led to their dependence on slave labor. It goes on to compare the economies, structures, and society of northern, southern, and western states, and looks at the crises and compromises of the early nineteenth century, including the Missouri Compromise. Students learn about the Bank Wars, controversies regarding tariffs and states' rights against national sovereignty, as well as the judiciary's role in establishing federal and state powers. The unit also covers Andrew Jackson's presidency and major events like nullification, the banking crisis, and Indian policy, how the Trail of Tears developed conflict between the judiciary and executive branches, and compares Jacksonian and Jeffersonian democracies. The unit goes on to discuss religion in the early nineteenth century including Revivalism and Evangelical Protestantism, how religion influenced politics, particularly the Enlightenment, Secularism, and Rationalism against the reactionary religious revival, and covers the Second Great Awakening. Students also learn about the main figures in the transcendental theological and literary movement, American romanticism in arts and literature, and the popular press and mass culture. Students find out about how American Indians were forced to migrate, evaluate historical debates for and against the forced removal of natives from their land, and analyze US treaties and policies towards American Indians such as the Indian Removal Act. This unit covers Manifest Destiny, the United States' westward expansion, and cultural interactions between settlers and indigenous populations, particularly in Mexico, Texas, California, and Oregon. The unit concludes with an analysis of the Mexican-American War, its main events and battles, the Treaty of Guadalupe Hidalgo, how this war contributed to American imperialism, and historical arguments for and against the US annexation of the southwest.

### **Unit 5: The Civil War**

This unit goes deeper into the economies and politics of the northern and southern states with a focus on Clay's American system and Polk's opposition to it. This unit also covers the legislative policies pertaining to slavery in the early nineteenth century and debates the ethical dimension of slavery dating from the Constitutional Convention, including Abolition, the Missouri Compromise, and the Wilmot Proviso; identifies key abolitionist figures, slavery leaders; and assesses arguments made for and against slavery. This unit discusses major events that led to the Civil War, such as the Compromise of 1850, the Kansas

Nebraska Crisis, the publication and popularity of Uncle Tom's Cabin, anti-slavery societies, and sectional splits in northern and southern churches. It also analyzes the role that the US Supreme Court played in the slavery debate and the abolitionists' split over John Brown's raid on the Harper's Ferry armory in 1859. This unit goes on to discuss how Abraham Lincoln's "House Divided" speech affected the southern states, his election to the presidency in 1860, his attempts to avoid the Civil War, and reasons that the southern states wanted to secede. This unit analyzes the economic, political, and military strengths of the Union and Confederacy when the Civil War erupted, prominent political and military leaders from each side, and foreign intervention in America's war. Students also learn about the Bull Run, the Peninsula Campaign, the 90-day war, Antietam, the Battle of Shiloh, and other major battles of the Civil War. This unit also compares leaders such as Lincoln and Davis, and Lee and Grant. It also compares the war's effects on the Union and Confederacy, the surrender of the Confederates, and Lincoln's assassination. This unit ends by evaluating the role played by African Americans and women in the Union's war efforts, disagreements among abolitionists regarding the extent of African American rights, and the Emancipation Proclamation and its impact on the Civil War.

### **Unit 6: Reconstruction**

In this unit, students learn about the Confederate states at the end of the Civil War, the ambitions and main goals of the Reconstruction, the US Constitution's Thirteenth, Fourteenth, and Fifteenth Amendments, and the conflict between President Johnson and the Republican Congress leading up to his impeachment. This unit also analyzes Reconstruction programs, contrasts carpetbaggers and scalawags, the Black Reconstruction and Reaction, and examines the role that African Americans played in the Reconstruction. Students also learn about tense race relations in the southern states, the Tilden/Hayes controversy, the compromise of 1877 and its impact on social history, and the effects of Reconstruction. This unit analyzes how the southern economy adapted to the abolition of slavery through sharecropping and the crop-lien system, and how the abolition of slavery encouraged industrialization to spread from the North to the South. This unit concludes with an analysis of the Jim Crow laws in the southern states, the growth of a militant white supremacy after Reconstruction, and how the Compromise of 1877 effectively led to intensifying institutionalized racism in the southern states, as is exemplified by the emergence of the Ku Klux Klan.

## **Advanced History – AP\* Edition, Semester B – *also available in vCourses***

### **Unit 1: The Changing Nation**

This unit is vital to understanding the factors that contributed to America's westward expansion beyond the Mississippi River, the transcontinental railroad, new farming and mining techniques, and the role of the government in westward expansion. It covers how this westward expansion affected the United States and American communities, such as racial and ethnic groups. Students will also learn what led to the Industrial Revolution in the late nineteenth century, significant inventors and inventions, and how these inventions affected American society and the workforce, led to the creation of labor unions and clashes between these unions and corporations. Students find out about the factors that contributed to the high immigration rates during the late nineteenth century, what groups made up these new immigrants, and their impact on American society. The unit also covers how industrialization and immigration led to the growth of American cities, the political leanings in these cities, and the contrasting lifestyles of the upper, middle, and working classes in the cities. It looks at the new technologies, transportation systems, and other facilities available in American cities. Lastly, students learn about how industrialization in the late nineteenth century affected intellectual and cultural movements such as literature, art, religion, social reform, and leisure activities.

### **Unit 2: Populism and Progressivism**

This unit examines American political practices during and after the Civil War, including the corruption of the Grant Administration and other domestic political issues. It also examines the populist movement of the late nineteenth century, how the agricultural economy affected this movement, the Granger

movement, and the election of 1896. This unit looks at the Progressive Era, its main tenets and legislative victories, and the presidencies of progressives like Theodore Roosevelt, Taft, and Wilson. Students also learn about the election of 1912, the Federal Reserve, the Nineteenth Amendment, and how Progressivism changed the role of government. The unit then concludes with how Progressivism and industrialization changed the roles of African Americans and women, compares prominent African Americans like WEB DuBois and Booker T. Washington, and looks at the women's suffrage movement and leading women activists of the era.

### **Unit 3: The United States on the Global Stage**

This unit explores the global role of the United States through the expansionism of the late nineteenth century, the Spanish American War, and the Filipino War, and how they affected US foreign policy and imperialism. The unit also examines the causes of World War I, why America chose to abandon its initial neutral stance to side with the Allies in Europe, America's efforts on the home front, major battles on the warfront, President Wilson's world view, the Treaty of Versailles, and the League of Nations. Students learn about the prosperity of the 1920s caused by major economic developments such as advertising and consumerism, the stock market bubble created in this decade, and the presidencies of the Republicans Harding, Coolidge, and Hoover. This unit also looks at the effects of Modernism in the 1920s on art, science, religion, popular thought, and culture, through Freud's psychological theories, the Art Deco movement, the development of Jazz, and the Harlem Renaissance. It ends with the antimodernist sentiments brought to the fore in the 1920s, the resurrection of the Ku Klux Klan, religious fundamentalism, xenophobia, how nativism influenced political thought in this decade, race relations, the establishment and subsequent repeal of Prohibition, and the changing attitudes toward minorities and women.

### **Unit 4: The Great Depression and the New Deal**

In this unit, students understand how the stock market bubble burst, leading to the stock market crash of 1929 and the Great Depression in the 1930s, President Hoover's inability to prevent the collapse of the US economy, and how the crash affected US society across the 1930s. It examines FDR's presidency, his administration's strategies for dealing with the Great Depression, including the New Deal programs and the 3 R's: Relief, Recovery, and Reform, the increased government involvement in the US economy, and how the unstable economic conditions led to the rise of socialism and communism in the nation. Students will learn about FDR's first two presidential terms, his New Deal coalition, opposition to and support for the New Deal programs, and shifting loyalties between the Republicans and Democrats during the Great Depression. This unit concludes by looking at how the Great Depression and the New Deal affected American society and expanded the role of the federal government; how American culture changed in the 1930s with innovations in popular electronic entertainment that provided escape to the masses from grim economic times; and how it changed how presidents interacted with the people, as exemplified by FDR's famous fireside radio chats.

### **Unit 5: World War II**

This unit traces the rise of fascism, totalitarianism, and militarism in the world and how the United States responded to it. It covers the rise of Hitler in Germany and Mussolini in Italy and Japan's militarism, how nations around the world split into the Allies and Axis countries as World War II became inevitable, how the United States again assumed a neutral position, while really supporting the Allies, and the forces behind the nation's isolationism. Then this unit identifies events that led to the United States entering World War II, such as Japan's attack on Pearl Harbor. It examines the "theaters of war" and traces the Nazi defeat in Europe, major battles in the Pacific. Students will also learn about the Manhattan Project, how the United States responded to Japanese resistance by unleashing atomic bombs on Hiroshima and Nagasaki, and the reactions to and repercussions of these acts. Students also learn how World War II changed American society, the role of women and African Americans, the changes in the US economy, and how the United States emerged from this war as the world's leading economic power. This unit concludes with an explanation of how the federal government changed in the United States, the Executive Order 9066, and the civil rights activities during and after the war.

## **Unit 6: The Cold War and the Transformation of American Society**

This unit explores the causes behind the Cold War with the Soviet Union, President Truman's policy towards the Soviets, early Cold War incidents such as the Berlin Airlift, the Marshall Plan, and political theories of the time on how to deal with the Soviet Union. Students also learn about the Asian Cold War, the Chinese Civil War, how the United States reacted to the collapse of the Republic of China, what led to the Korean war and its impact on American politics, why General MacArthur was fired, the post-World War II US economy, and how the Republican majority in the 80th Congress resulted in the rejection of Democratic policies. This unit also covers President Truman's approach to civil rights and his Fair Deal, and the rise of anti-Communist feelings in the United States. It analyzes Eisenhower's foreign policies, the Red Scare and McCarthyism in the nation, compares the foreign policies of Cold War presidents Truman, Eisenhower, and Kennedy, and summarizes events such as how the Cuban Missile Crisis affected Cold War diplomacy. This unit goes on to examine the modern civil rights movement in the 1950s, including key civil rights leaders, events, and achievements through speeches, documents, and other sources. The unit concludes by exploring how American society, and in particular the middle class, changed in the 1950s because of the wartime economy, scientific and medical innovations, federal investments in education and infrastructure leading to the growth of suburbs, the influence of television on the middle class, and the emergence of a dominant youth culture.

## **Unit 7: Changing Times: The Tumultuous Decades of the 1960s and 70s**

This unit deals with the election of 1960 and President Kennedy's victory. It examines his administration, his domestic policies, and his view on civil rights. The unit also looks at, the civil rights movement of the 1960s, its main activists, such as Martin Luther King Jr., and the freedom riders. It goes on to evaluate Truman's and Johnson's administrations, the Great Society Legislation, and the War on Poverty, the Vietnam War and reactions to the war in the United States, and the counterculture movement. The popular culture, Black Power, and Feminist movements of the 1960s and 70s are addressed. Students learn about the election of 1968, Nixon's presidency, Nixon's and Kissinger's foreign policies, the concept of an "Imperial" presidency, and the Watergate scandal. This unit concludes with a glimpse into the 1970s and 80s, including the Ford and Carter administrations, changes in the US economy such as de-industrialization, and moving toward a service-based economy. The energy crisis, the establishment of OPEC, the environmental movement, the end of détente, and the resolution and implications of the Iran hostage crisis are also covered.

## **Unit 8: The Return of Conservatism and the Post-Cold War Era**

This unit covers the 1980 election and Reagan's presidency, his economic policies and their impact on the US economy and politics, his foreign policies, his relationship with Soviet President Gorbachev and the end of the Cold War, and also the fall of the Berlin Wall, the Eastern Block, and the Soviet Union. This unit also covers demographic changes in the United States brought on by the retirement of the Baby Boom generation and a new wave of immigration, and also identifies migration patterns from the 1960s to the 1980s. Students learn about post-Cold War foreign military policies of George W. H. Bush, Bill Clinton, and George W. Bush, including the Gulf, Iraq, and Afghanistan Wars. It also compares unilateralism with multilateralism and idealism with realpolitik. Students look at terrorism within and outside the United States, including the roots of radical Islamic terrorism, the September 11, 2001 attacks, the Global War on Terror, and the changes in US foreign policy designed to tackle terrorism. This unit concludes by exploring the modern environmental movement to contain climate change and environmental degradation.

**World History, Semester A – also available in vCourses**

## **Unit 1: Early Civilizations**

Middle Eastern Civilizations: Geographic Setting, First Civilizations, The Sumerian Civilization, The Early Egyptian Civilization, New Kingdoms, Religious and Cultural Developments in the Levant, The Decline of Mesopotamia and Egypt, Ancient India: The Geographic Setting, The Indus Valley Civilization, The Aryan Migration, Hinduism, Buddhism, The Maurya Dynasty, The Gupta Dynasty, The Spread of Hinduism  
The Foundation of Chinese Culture and History: Geographic Overview, Agriculture, Animal Husbandry, Resources, Geographical Influences on Chinese Society, Prehistoric China, China's Early Dynasties: An

Historical Overview, The Silk Road, The Emperor System and the Mandate of Heaven, China's Cultural Foundations, The Origins and Development of Confucianism, The Five Relationships of Confucianism, Daoism, Buddhism, and Confucianism in Chinese Culture, Confucianism and Legalism in Chinese Government, Family and the Confucian Ideal in China, Chinese Language

### **Unit 2: The Growth of Civilization**

The Triumph of Greek Civilization: Our Heritage from Ancient Greece, Geography, Early Greek Civilization (3000-1200 B.C.), The Greek Dark Age (1200-800 B.C.), Government in Classical Greece (800-400 B.C.), Greek Trade and Colonization (800-600 B.C.), Sparta, Athens, The Persian Wars, The Peloponnesian Wars, Philip II of Macedon, Alexander the Great, Hellenistic Age, Architecture and Art, Drama, Philosophy, Science and Technology, Greek Society, The Rise and Fall of Rome: Our Heritage from Ancient Rome, The Early Roman Republic, From Republic to Empire, The Pax Romana, Christianity Develops in the Roman Empire, Persecution of Christians in the Roman Empire, Christianity Gains Acceptance in the Roman Empire, The Decline of the Roman Empire, The Rise and Spread of Islam: The Arabian Peninsula, The Founding of Islam, Islam as a Religion and a Culture, The Spread of Islam in the Middle East, Rise and Fall of the Abbasid Dynasty, The People under Islam, Spread of Islam Beyond the Middle East

### **Unit 3: The World in Transition**

Byzantine Empire: The Origins of the Byzantine Empire, The Emperor Justinian, Muslim Attacks on the Byzantine Empire, Religious Controversy, The Fall of the Byzantine Empire, Europe after the Fall of Rome: The Germanic Kingdoms, The Reign of Charlemagne, Life Changes during the Middle Ages, Feudalism, Manorialism, Social Structure, The Medieval Catholic Church, Medieval Learning and Culture, Jews in Medieval Europe, The Crusades, Christian and Muslim View Points, Rise of Trade and Towns, The Development of Medieval Monarchies in Europe: The English Monarchy, The French Monarchy, The Holy Roman Empire, The Spanish Monarchy

### **Unit 4: The Early Modern World**

The Resurgence of Europe: The Revival of Trade and City Life, The Early Development of Capitalism, Origins of the Italian Renaissance, Florence, Humanism, Renaissance Literature, Renaissance Art and Architecture, Renaissance Science and the Scientific Revolution, Women in the Renaissance, Origins of the Reformation, The Protestant Reformation, The Catholic Counter-Reformation, Results of the Reformation, The Development of National Monarchies in Europe: Rise of Absolute Monarchs, The English Monarchy, The French Monarchy, The Spanish Monarchy, The Russian Monarchy, The Prussian Monarchy, The Austrian Monarchy, Mongols, Moguls, and Ottomans: Genghis Khan and the Rise of Mongolian Power, Kublai Khan, Marco Polo, Decline of Mongolian Power in China, The Mongols in Russia, Southeast Asia under Mogul Rule, The Grandeur and Decline of the Ottoman Empire

## **World History, Semester B – also available in vCourses**

### **Unit 1: Political and Cultural Revolution**

The Age of Revolution: The Enlightenment (17th to early 19th centuries), The American Revolution (1776-1783), The French Revolution (1789-1799), The Rule of Napoleon Bonaparte (1799-1815), Effects of the French Revolution, Revolution in Latin America, The Industrial Revolution: Causes of the Industrial Revolution, Important Developments in the Industrial Revolution, Effects of the Industrial Revolution  
Meiji Restoration: Opening of Japan, Meiji Restoration, Meiji Constitution, Modernization and Industrial Development, Social Changes, Reasons for Expansion, First Sino-Japanese War: 1894-1895, Russo Japanese War: 1904-1905, Racial Relations between the United States and Japan

### **Unit 2: European Domination**

The Impact of Nationalism: The Effects of the Congress of Vienna, Unification of Germany, Unification of Italy, Nationalism in Eastern Europe  
Advances in Democracy: Political, Economic, and Social  
Democracy, Advances in Democracy in Great Britain and France, Status of Democracy in Other Nations of Europe, Status of Democracy in North America, United States, Slavery, Education, Women's Rights, and Other Reforms, Canada, Mexico, La Reforma, 1910 Revolution  
European Imperialism in Africa and Asia: Reasons for European Imperialism, Extent of European Imperialism, Impact of Imperialism

### **Unit 3: The World at War**

Russia: Reform, Repression, and Revolution: Autocratic Russia in the 19th Century, Reform and Reaction, Revolutionary Factions in Russia, World War I and Revolution, Global Impact Causes, Course, and Conclusion of World War I: Europe before World War I, The World at War, The Treaty of Versailles and Its Effects Causes, Course, and Conclusion of World War II: Prelude to War, Fascist Aggression and Western Appeasement, The World at War, The Holocaust

### **Unit 4: The World Since 1945**

The Early Years of the Cold War: Europe at War's End, The Cold War, The Cold War after Stalin, The United Nations and International Law, Communism Declines and Europe Is Transformed: Communist Europe from Stalin to Gorbachev, Reform and Revolution in European Communism, Consequences of Political Change in the East, The Search for Solutions to Global Problems: Promises and Perils of Nuclear Energy, Nuclear Weapons and Disarmament, Space Exploration, The Information Age, Global Economy, The Global Trade Architecture, Medical Breakthroughs, Pollution, Endangered Species

## **Geography, Semester A – also available in vCourses**

### **Unit 1: The Geographer**

This unit provides information on how to use and construct maps, globes, atlases, and other geographic tools to locate and derive information about people, places, and environments.

### **Unit 2: The Earth**

This unit describes the major components of Earth— atmosphere, hydrosphere, lithosphere, and biosphere—and how they interact, including the forces that modify Earth's surface and how weather and climate are produced.

### **Unit 3: United States**

This unit covers the physical and human geography of the United States, including its topography, climate, vegetation, resources, population, and economic, urban, and political geography.

### **Unit 4: Canada**

This unit covers the physical and human geography of Canada, including its topography, climate, vegetation, resources, population, and economic, urban, and political geography.

## **Geography, Semester B – also available in vCourses**

### **Unit 1: Europe**

This unit covers the physical and human geography of Europe, including its topography, climate, vegetation, resources, population, and economic, urban, and political geography.

### **Unit 2: Countries of the CIS**

This unit covers the physical and human geography of Russia and other countries of the CIS, including their topography, climate, vegetation, resources, population, and economic, urban, and political geography.

### **Unit 3: Oceania**

This unit covers the physical and human geography of Oceania, including its topography, climate, vegetation, resources, population, and economic, urban, and political geography.

## Civics, Semester A

### Unit 1: Basic Concepts of Power and Authority

What Are Politics and Government?: Politics and Government – What They Are, Government – Why We Have It, Sources of Authority, Reasons for Using Authority, Disadvantages to Using Authority, Why We Limit the Use of Authority, Choosing People in Authority, The Public Interest and Public Goods, Free-Riders, Disagreements over What Is Good for the Public, Intangible Public Goods, Individual Rights, Personal and Civic Responsibility, What Is Democracy? Unitary, Nonfederal, and Federal Governments, Totalitarian and Authoritarian Governments, Democratic Government, Direct vs. Indirect Democracy, Limits on Government, Limits on Government: Civil Liberties, Limiting Government through Structure, Limiting Government through Civil Society, The Rule of Law, Political Parties, Liberals, Conservatives, and Moderates, Other Ways to Participate, There Are Different Ways to Participate in Political Life, Benefits and Drawbacks to Each Method of Political Participation, Choosing the Method of Political Participation That Is Appropriate

### Unit 2: National Institutions of Government, Part 1

The U.S. Constitution: The Preamble of the Constitution, Basic Principles of the Constitution, Federalism, Separation of Powers, Checks and Balances, The Elastic Clause, Interstate and Federal-State Cooperation, Amending the Constitution, The Supremacy Clause, Article VII, The Bill of Rights, The “National Supremacy Amendments”, The “Progressive Amendments”, The Unwritten Constitution  
National Institutions – Congress: Congress: The Legislative Branch, Enumerated and Implied Powers, Non-Legislative Functions of Congress, Qualifications and Selection Process, Congressional Leadership, The Committee System, Membership of Committees, The Legislative Function: How a Bill Becomes a Law, Role of the Subcommittee, Congress Passes the Bill

### Unit 3: National Institutions of Government, Part 2

National Institutions – President: The Presidency: The Executive Branch, Powers of the President, Qualifications, Term, Succession, and Removal, Electing a President, Commander-in-Chief of the Armed Forces, Chief Diplomat, Chief Legislator, Chief Executive, The President and Congress, The President and the Judiciary, The Changing Nature of the Presidency  
National Institutions – Judiciary: The Courts: The Judicial Branch, Selection of Judges and Justices, District Courts, Courts of Appeals, The Supreme Court, How a Case Gets to the Supreme Court, The Relationship between the Federal and State Court Systems, Factors in Judicial Decision-Making, Powers of the Courts, Landmark Cases of the Supreme Court, Civil Liberties

## Civics, Semester B

### Unit 1: Society

Linking America – The Media: Linkage Institutions: Connecting People and Government, The Media, What Is Public Opinion? How Public Opinion Is Measured, Potential Shortcomings of Polls, How Polling and Public Opinion Affect Politicians, Politics, and Policy, The Media’s Influence on the Public, The Contemporary Media Scene, Private Ownership of the Media, How the Media Cover Politicians and Government, How Politicians Use the Media  
Linking America – Political Parties: Linkage Institutions: Connecting People and Government, Political Parties, Political Parties Defined, Democrats and Republicans Today, The Two-Party System, The Single Member District/Plurality Voting Electoral System, Party Structure, Political Parties in Congress, The Party-in-the-Electorate, Interest Groups, Interest Group Methods, Interest Group Formation and Maintenance

### Unit 2: Being a Citizen

State and Local Government: State Constitutions, History of State Constitutions, State Constitutions Today, The Purpose of State Government, Elections, Public Safety, Chartering Corporations, Supervision of Local Governments, Federalism, Relationship of State Governments to National Government, State Political Culture, The Structure of State Governments, Legislative Branch, Executive Branch, Judicial Branch, Local Government, Types of Local Governments, Globalization and Local Governments, Washington, D.C. – A

Unique City, Revenues, Tribal Government, Federal/Tribal Relations Today, Territorial Governments  
Citizenship: What Is a Citizen?, Rights of Citizens, Personal Rights, Political Rights, Economic Rights, Rights  
of Citizens: Civil Liberties, Rights of Citizens: Civil Rights, Affirmative Action, Citizens' Responsibilities, Rights  
and Responsibilities of Permanent Residents, Civic Virtues: Character Traits that Foster Democracy,  
Global Citizenship, Effects of Globalization, Public Discourse

### **Unit 3: Policy and the Citizen**

The U.S. Economy: Scarcity, Resources of Production, Opportunity Cost, Economic Systems, Market  
Economies, Command Economies, Most Economies Are Mixed Economies, How a Market Economy  
Works, Demand and Supply, How Is a Market Price Determined? The Government in the U.S. Economy,  
Public Goods and Services, Market Power and Competition, Eliminating or Reducing Unintended  
Negative Effects, Reasonable Distribution of Income, Regulating Banking, The Centralization versus  
Decentralization Argument, Banking Regulations Tightened, Then Relaxed, Fiscal and Monetary Policies,  
Business Cycles, Using Fiscal and Monetary Policies to Affect the Business Cycle, Fiscal Policies, Monetary  
Policies Involvement in World Affairs: Foreign Policy, National Interest, Actors in U.S. Foreign Policy: The  
President, Commander-in-Chief, Chief Diplomat, Appointment and Recognition, The National Security  
Council, Actors in U.S. Foreign Policy: Congress, The Power of the Purse, The Power of Confirmation, The  
Advice and Consent of the Senate, Actors in U.S. Foreign Policy: The Federal Bureaucracy, The State  
Department, The Department of Defense, Formerly Domestic-Only Bureaucracies, Actors in U.S. Foreign  
Policy: Civil Society, Think Tanks, Interest Groups, The Media, Summary

## **U.S. Government, Semester A – also available in vCourses**

### **Unit 1: Foundations of American Government**

American Political Culture Political Socialization; Characteristics of a Nation; Geography; Population;  
Sovereignty; Government; Bureaucrats; Unitary, Nonfederal, and Federal Governments; Totalitarian and  
Authoritarian Governments; Democratic Government; Direct vs. Indirect Democracy; Political Parties;  
Constitutional Government; Governments without a Constitution; Economic Systems; Capitalism;  
Socialism; Communism; America: A Mixed-Capitalist Economic System The Philosophy of the U.S.  
Constitution The Greeks; and Aristotle: The Romans; Feudalism: The Reformation: The Magna Carta;  
Thomas Hobbes (1588–1679); The Enlightenment; The English Bill of Rights; John Locke (1632–1704);  
Montesquieu (1689–1755); Mercantilism; The Spanish and French Colonies; The English Colonial  
Experience; Similarities and Differences of the American Colonial Empires; Experiments with Government  
in the English Colonies; Different Types of English Colonial Governments; Limitations of English Colonial  
Government: The Road to Revolution; Imperial Battles for Dominance in the New World: The End of  
“Salutary Neglect”: The First Continental Congress; The Second Continental Congress; The Declaration of  
Independence

### **Unit 2: The Constitution**

Writing the U.S. Constitution Government under the Articles of Confederation; Foreign Affairs under the  
Confederation; Fatal Flaws of the Articles of Confederation: The Constitutional Convention: The Great  
Compromise; The Three-Fifths Compromise; Powers of the Federal Government under the Constitution:  
The Struggle over Ratification: The Preamble to the Constitution, The Constitution as a Governing  
Document, The Preamble to the Constitution; Basic Principles of the Constitution; Federalism; Separation  
of Powers; Checks and Balances; How Congress Is Organized and Does Business: The Elastic Clause: The  
Presidency; The Judicial Branch; Interstate and Federal-State Cooperation; Amending the Constitution;  
The Supremacy Clause; Article VII: The Bill of Rights: The “National Supremacy Amendments”; The  
“Progressive Amendments”; The Unwritten Constitution

### **Unit 3: Linkage Institutions**

The Media What Is Public Opinion? How Public Opinion Is Measured; Types of Political Polls; Potential  
Shortcomings of Polls; How Polling and Public Opinion Affect Politicians, Politics, and Policy; The Media's  
Influence on the Public: The Contemporary Media Scene; Private Ownership of the Media; Government  
Regulation of the Media; How the Media Cover Politicians and Government; How Politicians Use the  
Media Political Parties Political Parties Defined; History of Political Parties in America; Democrats and  
Republicans Today; The 2000 Presidential Election: The Two-Party System: The Single-Member

District/Plurality Voting Electoral System; Proportional Representation Electoral Systems; Party Structure; Political Parties in Congress; The Party-in-the-Electorate; Interest Groups; Interest Group Methods; Interest Group Formation and Maintenance Campaigns and Voting Election Campaign Functions: The Nomination: The Personal and Organizational Campaigns; Campaign Finance: The Media Campaign: The Media Response to the Media Campaign; The General Election Campaign; Change and Legitimacy: The Purposes Served by Elections; Costs and Benefits of Voting; Participation and Voter Turnout in the United States

## U.S. Government, Semester B – *also available in vCourses*

### **Unit 1: The Congress and the Presidency**

The Congress Legislative Powers of Congress: Enumerated and Implied; Non-Legislative Functions of Congress; Confirmation and Ratification; Legislative Oversight; Amending the Constitution; Impeachment; Qualifications for Office: The Membership of Congress; Decision-Making of Individual Members of Congress; The Bicameral Nature of Congress; The Term of Congress; Congressional Leadership; Speaker of the House; President of the Senate; Majority and Minority Leaders; The Committee System; Standing Committees; Joint, Conference, and Ad Hoc Committees; Membership of Committees; Congressional Staff; Congressional Support Agencies: The Legislative Function: How a Bill Becomes a Law; Role of the Subcommittee; Congress Passes the Bill, The Presidency, The President's Constitutional Qualifications; Order of Succession to the Presidency; Electing the President; Removing the President from Office; The Constitutional Powers of the Presidency; Commander-in-Chief of the Armed Forces; Chief Diplomat; Chief Legislator; Chief Executive; Chief of State; The President and Congress; The President and the Judiciary; The Changing Nature of the Presidency

### **Unit 2: Other Governing Institutions**

The Federal Bureaucracy Defining "Bureaucracy"; Classifying the Bureaucracy; Cabinet-Level Departments and Their Agencies; Iron Triangles and Issue Networks; Independent Agencies; Government Corporations; Working in the Bureaucracy: The Civil Service; Working in the Bureaucracy: Political Appointees; Administrative Discretion: The Issue of Accountability, The Judiciary, Federal Courts Are Established by Act of Congress; District Courts; Courts of Appeals; Supreme Court; How a Case Gets to the Supreme Court: The Relationship between the Federal and State Court Systems; Factors in Judicial Decision-Making; Selection of Judges and Justices; Powers of the Courts; Landmark Cases of the Supreme Court; Civil Liberties; Civil Rights; Affirmative Action State, Local, Territorial, and Tribal Government State Constitutions; History of State Constitutions; State Constitutions Today: The Purpose of State Government; Elections; Public Safety; Chartering Corporations; Supervision of Local Governments; Federalism; Relationship of State Governments to National Government; State Political Culture; The Structure of State Governments; Legislative Branch; Executive Branch; Judicial Branch; Local Government; Types of Local Governments; Globalization and Local Governments; Washington, D.C.—A Unique City; Revenues; Tribal Government; Federal/Tribal Relations Today; Territorial Governments

## Economics, Semester A – *also available in vCourses*

### **Unit 1: Foundation and Concepts**

Economics: The Science of Scarcity: Definition of Economics, Definitions Are Important to Economics, Scarcity and Economic Value, Scarcity, Economic Value, Resources of Production, Natural Resources (Land), Human Resources (Labor), Capital Resources, Additional Possible Resources of Production, Human Capital, Entrepreneurs, Goods and Services, Types of Goods and Services, Consumer Goods and Services, Capital Goods and Services, Some Goods and Services Can Be either Consumer or Capital, Rational Self-Interest, Marginal Analysis, Marginal Benefit and Marginal Cost, Microeconomics and Macroeconomics, Microeconomics, Macroeconomics, Circular Flow Model of Economic Participants, Opportunity Cost, Examples of Opportunity Cost, Economic Rules Affect Everyone Equally Economic Systems, Efficiency, and Productivity: The Three Basic Questions of Economics, What to

Produce? How to Produce?, For Whom to Produce?, Economic Systems, Traditional Economies, Market Economies, Other Names for a Market Economy, Command Economies, Comparing Market and Command Economic Systems, Strengths and Weaknesses of Market Economies, Strengths, Weaknesses, Strengths and Weaknesses of Command Economies, Strengths, Weaknesses, Allocation of Scarce Resources, Distribution of Goods and Services, Politics and Economics Are Linked, Socialism and Communism, Historical Roots, The Communist Manifesto, Modern Socialism and Communism, The Influence of Socialism and Communism, Prior to World War II, After World War II, Communism, Violence, and Political Dictatorships, The Decline and Virtual Extinction of Communism, Most Economies Are Mixed Economies, What Is a Mixed Economy?, Why Do Mixed Economies Exist?, The United States Is Mostly a Market Economy, Comparative Advantage, Specialization, and Productivity, Comparative Advantage and Specialization, Productivity and Labor Productivity

## **Unit 2: The Market Economy**

Demand and Supply in a Market Economy: Demand, Benefit (Utility) Maximization, Declining Marginal Benefit (Utility), Limitations on the Law of Demand, Market Demand, Illustrating Demand, Demand Schedule, Demand Curve, Demand versus Quantity Demanded, Changes in Demand, A Change in Consumer Preferences, A Change in the Number of People in the Market, A Change in People's Income Level, A Change in the Price of Other Goods, A Change in Consumer Expectations, Elasticity of Demand, Supply, Role of Profit, Profit Maximization Is the Goal of All Firms, Limitations of the Law of Supply, Market Supply, Illustrating Supply, Supply Schedule, Supply Curve, Supply versus Quantity Supplied, Changes in Supply, A Change in the Cost of Resources, A Change in Technology, A Change in the Prices of Other Goods or Services, A Change in Producer Expectations, A Change in the Number of Suppliers, Elasticity of Supply, Market Equilibrium of Demand and Supply, The Market Price Is the Equilibrium Price, Illustrating Market Equilibrium, Adam Smith's Invisible Hand at Work, Benefits of Markets, Competition in Markets Is More Efficient, Markets Reduce Transaction Costs, Shortages and Surpluses, Effects of Shortages and Surpluses, How Price Ceilings and Floors Affect Supply and Demand, Protect Consumers with Price Ceilings, Protect Sellers with Price Floors Competition, Market Structures, and International Trade: Competition and Market Structures, Pure Competition, Perfect Competition, Market Price and Pure Competition, Pure Competition, Efficiency, and Technological Innovation, Imperfect Competition, Monopolistic Competition, Oligopoly, Interdependent Behavior in Oligopolies, Monopoly, The Role of Government with Imperfect Competition, International Trade, The Economic Basis for Trade, International Trade Basics, Tariffs, Subsidies, and Other Trade Restrictions, Costs and Benefits of Trade Restrictions, Costs, Benefits, Specialization and Comparative Advantage in International Trade, Free Trade and Its Costs and Benefits, The Trend to Free Trade Began with the United States, The Great Depression and the Hawley-Smoot Tariff, The Reciprocal Trade Agreements Act, The United States Influences the World, General Agreement on Tariffs and Trade (GATT), World Trade Organization (WTO), Free Trade by Regional Agreement Money, Banking, and Finance: Money, The Three Uses of Money, A Medium of Exchange, A Unit of Account, A Store of Value, The Six Characteristics of Money, Durability, Portability, Divisibility, Uniformity, Limited Supply, Acceptability, The Sources of Money's Value, Commodity Money, Representative Money, Fiat Money or "Legal Tender", Money and the History of American Banking, The Banking System before the Civil War, The First Bank of the United States, The Second Bank of the United States, The Banking System after the Civil War, The Banking System in the 20th Century, Federal Reserve Act, The Great Depression and the Glass-Steagall Act, Depository Institutions Deregulation and Monetary Control Act (DIDMCA) of 1980, Monetary Policy, Money Supply, Saving, Investing, and the Financial System, Commercial Banks, Savings, Loans, Mortgages, Credit Cards, Other Financial Institutions, Financial Markets, Stocks, Treasury Bills, Bonds, Primary versus Secondary Markets, Risk, Liquidity, and Return, Summary

## Economics, Semester B – also available in vCourses

### Unit 1: Market Institutions

Business and Labor: Legal Forms of Business Ownership, Sole Proprietorships, Partnerships, Economies of Scale, Diseconomies of Scale, Corporations, Limited Liability, Stocks, Life Independent of Its Owners, Stocks and Bonds, The Board of Directors and Corporate Management, Stock Prices, Dividends, Taxes, Management and Ownership, Stock Market, Not-for-Profit Organizations, Financial Capital and Economic Capital, Labor: A Resource of Production, Human Capital Influences Wages and Salaries, Labor Supply and Demand Influence Wages and Salaries, Entrepreneurship and Economic Growth: Entrepreneurs, Characteristics of an Entrepreneur, Assistance for Entrepreneurs, Partners, Business Incubators, Government Assistance, Entrepreneurship, Entrepreneurship: A Source of Competitive Advantage, Entrepreneurship Has Taken Different Forms over Time, Early America, Modern America, Government Policies to Encourage Entrepreneurship, New Business Opportunity Creation, Legal Protections, Favorable Tax Policies, Encouragement of Capital Investment, Direct Assistance to Entrepreneurs, Infrastructure Spending, Encourage Education and Training, Economic Growth, Gross National Product (GNP) and Gross Domestic Product (GDP), Nominal and Real GNP and GDP, Technological Innovation and Government Policies Affect Economic Growth, Ways to Measure Economic Growth Other Than GNP and GDP, Standard of Living, Per Capita GDP, Cost of Living, Distribution of Income, Uneven Economic Growth, Summary

### Unit 2: Government and the Economy

The Government in a Mostly Market Economy: Public Goods and Services, Why Does the Government Provide Some Goods and Services? Government Actions that Influence the Economy, Market Power, Laws to Regulate Competition and Market Power, Externalities, Reasonable Distribution of Income, Influence on the Economy, Government Taxes, Types of Taxes, Sales Taxes, Real Estate Taxes, Excise Taxes, Income Taxes, Different Levels of Government, Federal Level, State Level, Local Level (Town, County, City, and/or Village), Comparing the United States to Other Nations, Taxation and Public Goods and Services, Efficiency and Distribution of Income, Democracies Sometimes Have Bad Economic Policies, Taxation and Debt, Price Controls Business Cycles and Government Policies: Business Cycles, Phases of Business Cycles, Business Cycle Interactions, Tracking Business Cycles, Negative Effects of Business Cycles, Recession and Depression, Inflation, Causes of Inflation, Demand-Pull Inflation, Cost-Push Inflation, Trade Deficit Inflation, CPI as a Measure of Inflation, Hyperinflation, Unemployment, What Is Unemployment? Types of Unemployment, Frictional Unemployment, Structural Unemployment, Cyclical Unemployment, Full Employment, Effects of Unemployment, Using Fiscal and Monetary Policies to Affect the Business Cycle, Fiscal Policies, Expansionary Fiscal Policies for a Recession, Contractionary Fiscal Policies for Inflation, Disadvantages of Fiscal Policies, Time Lags, Contradictory Goals, Threat of Inflation, Monetary Policies, Monetary Policy in the United States, Buying and Selling Federal Securities, Changing the Reserve Ratio, Changing the Discount Rate, "Loose" Versus "Tight" Monetary Policies, Loose Monetary Policies for a Recession, Tight Monetary Policies for Inflation, Disadvantages of Monetary Policies

### Unit 3: The Consumer

The Individual Consumer: Consumption, The Decision-Making Process, Identify the Situation or Problem That Requires a Decision, Gather Information That Will Help You Make a Wise Decision, Study the Information Gathered and Identify Your Options, Predict the Consequences of Your Decision, Implement Your Decision, Consumer Rights, The Right to Safety, The Right to Be Informed, The Right to Choose, The Right to Be Heard, Consumer Responsibilities, Credit and Borrowing Money, Credit Ratings, Advantages and Disadvantages of Credit and Personal Debt, Using Credit Responsibly, Debit Cards, Home Mortgages, Advantages of Owning Versus Renting, Mortgages Types, When to Buy a House, Saving and Investing, Savings, Savings Accounts, Certificates of Deposit, Money Market Accounts, Savings Bonds, Investments, Economic Goals and How to Achieve Them, Developing Your Human Capital, The Importance of Developing Your Human Capital, Deciding How to Develop Your Human Capital, Factors to Consider When Planning a Career, Your Abilities, Benefits, Projected Growth and Advancement Potential, Job Security, Nature of the Work, Finding a Job, Preparation, Interviewing, The Job Offer

# Electives

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## [Anthropology I: Uncovering Human Mysteries](#)— *also available in vCourses*

The aim of anthropology is to use a broad approach to gain an understanding of our past, present and future, and in addition address the problems humans face in biological, social and cultural life. This course will explore the evolution, similarity and diversity of humankind through time. It will look at how we have evolved from a biologically and culturally weak species to one that has the ability to cause catastrophic change. Exciting online video journeys to different areas of the anthropological world are just one of the powerful learning tools utilized in this course.

## [Anthropology II: More Human Mysteries Uncovered](#)— *also available in vCourses*

Anthropology has helped us better understand cultures around the world and through different time period. This course continues the study of global cultures and the ways that humans have made sense of their world. We will examine some of the ways that cultures have understood and gave meaning to different stages of life and death. The course will also examine the creation of art within cultures and examine how cultures evolve and change over time. Finally, we will apply the concepts and insights learned from the study of anthropology to several cultures found in the world today.

## [Archeology: Detectives of the Past](#)— *also available in vCourses*

George Santayana once said, "Those who cannot remember the past are condemned to repeat it." The field of archeology helps us to better understand the events and societies of the past that have helped to shape our modern world. This course focuses on this techniques, methods, and theories that guide the study of the past. Students will learn how archaeological research is conducted and interpreted, as well as how artefacts are located and preserved. Finally, students will learn about the relationship of material items to culture and what we can learn about past societies from these items.

## [Art History and Appreciation](#) – *also available in vCourses*

### **Unit 1: What is Art? Creation and Communication**

This unit covers approximately two weeks of instruction. This unit explores the main concepts of art, expression and creativity. It answers questions like what is art, what is creativity, and explains how and why people respond to art. It also covers basic design principles such as emphasis, balance, and unity, and the art evaluation process. The discussion of art includes art vocabulary, and also elaborates on the different media, tools, techniques, and processes artists use. This unit focuses on how to analyze images and the meanings that the artists convey through their art, whether denotative, connotative, persuasive, or rhetoric.

### **Unit 2: Art, History, and Culture**

This unit covers approximately two and a half weeks of instruction. Art in the form of sculptures, paintings, and tools from the Paleolithic and the Neolithic ages is explained in a way that reflects the lifestyle and advances of people during the Stone Age. The unit explores Egyptian art, including the famous Egyptian pyramids and funerary art. It also discusses Classical Greek and Roman art, including paintings, sculptures, and pottery. Greek and Roman architecture, such as temples and the monumental structures of the Acropolis and Coliseum are also highlighted.

### **Unit 3: Western and World Art Appreciation**

This unit covers approximately three and a half weeks of instruction. Students will explore the influence of the Church on art, including sacred images, architecture, paintings, sculptures, manuscripts, and mosaics. This unit will also discuss Islamic art and architecture and Renaissance art. It will explore art from Africa and from India, China, Japan, and other Asian countries. It concludes with art from the Americas, exploring the key features of American Indian art from different native civilizations and of Latin American art, including famous Latino artists such as Frida Kahlo and Diego Rivera.

### **Unit 4: Art and the Modern World**

This unit covers approximately three weeks of instruction. Christian art and its influences were discussed in the previous unit. This unit explores art from the Reformation and Counter-Reformation periods, particularly the distinctions between secular and sacred art that occurred when the Church split. It goes on to cover the characteristics of baroque art and architecture and how it is distinct from work of the Renaissance period. This unit also focuses on how the printing press revolutionized post-Renaissance art. It proceeds to elaborate on the blurred distinction between art and science in the modern world and the new media available to artists, which combine to make art a multisensory experience. This unit concludes by exploring how art influences and is influenced by politics and culture in the modern world.

### **Unit 5: Art in the 20th Century and Today**

This unit covers approximately three weeks of instruction. Students will explore modern architecture, new technologies, materials, and designs. This unit focuses on the relationship between form and function in architecture and famous architects, such as Louis Sullivan and Frank Lloyd Wright, their work, and their inspirations. This unit elaborates on modern design movements, such as the International Style, and modern industrial design and designers. It also focuses on developments in art after World War II. The unit examines contemporary art and artists and discusses newer careers in art, including animation and game design. To conclude, this unit looks at the visual culture that developed in the latter half of the 20th century, including photography, cinema, and television, as well as digital and computer-generated art.

## **Computer Applications and Technology – *also available in vCourses***

### **Unit 1: Introduction to Computers**

This unit covers approximately two weeks of instruction. It provides an overview of the parts of a computer and the basic tasks performed on a computer. In this unit, the student will determine the purpose and functions of a computer's input devices, output devices, hardware components, operating system, and software applications. This unit also demonstrates basic computer tasks such as managing folders and files and maintaining a computer.

### **Unit 2: Getting Connected with Technology**

This unit covers approximately two weeks of instruction. It illustrates the use of computers in our everyday lives. Students will explore online tools and resources to search the Internet, send email, and connect with people. The unit will explore the advantages and disadvantages of using computers and how computers have influenced society in recent times.

### **Unit 3: Word Processing**

This unit covers approximately four weeks of instruction. In this unit, students will work with word-processing software and its key components, and they will perform basic manipulation functions. Students will demonstrate how to create, modify, and print a document, as well as how to use various text editing and formatting tools. The unit explores how to track changes in a document and how to add, edit, and remove comments. It also explains how to create and format a table and insert and format images or graphics in a document. Students will explore reference tools, such as footnotes and endnotes, design a title page for a research paper, and demonstrate how to save a document as a webpage.

#### Unit 4: Spreadsheets and Databases

This unit covers approximately three weeks of instruction. In this unit, students will explore the types of documents that are appropriate to create using spreadsheet software and work with spreadsheet software and its key components. They will also perform basic spreadsheet manipulation functions. This unit illustrates creation, naming, and formatting of a worksheet and how to create and insert simple formulas and functions. It covers how to create, modify, and publish charts, as well as how to integrate spreadsheet data into word processing and presentation documents and sort and filter fields in a table. This unit also addresses the benefits of storing information in a database.

#### Unit 5: Presentations

This unit, which covers approximately four weeks of instruction, will familiarize students with presentation software and its key uses. Students will discover how to create effective presentation documents and determine the formatting. They will also explore how to use images, sounds, and animations in presentation documents, as well as gain familiarity with drawing and flowchart tools. This unit shows students how to print and distribute a presentation, how to run a slideshow, and how to save the presentation as a web page. Students will use the information in this unit to develop and present their own electronic slideshow.

#### **Gothic Literature: Monster Stories— also available in vCourses**

From vampires to ghosts, these frightening stories have influenced fiction writers since the 18th century. This course will focus on the major themes found in Gothic literature and demonstrate how the core writing drivers produce, for the reader, a thrilling psychological environment. Terror versus horror, the influence of the supernatural, and descriptions of the difference between good and evil are just a few of the themes presented. By the time students have completed this course, they will have gained an understanding of and an appreciation for the complex nature of dark fiction.

#### **Great Minds in Science: Ideas for a New Generation— also available in vCourses**

Is there life on other planets? What extremes can the human body endure? Can we solve the problem of global warming? Today, scientists, explorers, and writers are working to answer all of these questions. Like Edison, Einstein, Curie, and Newton, the scientists of today are asking questions and working on problems that may revolutionize our lives and world. This course focuses on 10 of today's greatest scientific minds. Each unit takes an in-depth look at one of these individuals, and shows how their ideas may help to shape tomorrow's world.

#### **Health – also available in vCourses**

#### Unit 1: Personal Health, Nutrition, and Fitness

Unit 1: Personal Health, Nutrition, and Fitness—Week 1		
Day	Activity/ Objective	Type
1	Pretest—Unit 1	Online
2	Your Lifestyle and Your Health Objective: Characterize behaviors and lifestyle choices that enhance or hinder your health.	Tutorial
3	Your Lifestyle and Your Health, continued	Tutorial

4	Your Role in Maintaining Your Health Objective: Describe your personal role in maintaining health throughout your life.	Exploration
5	Your Role in Maintaining Your Health, continued	Exploration

### Unit 1: Personal Health, Nutrition, and Fitness—Week 2

Day	Activity/ Objective	Type
1	Guidelines for a Healthy Diet Objective: Identify characteristics of the MyPlate Food Guidance System.	Tutorial
2	Guidelines for a Healthy Diet, continued	Tutorial
3	Dietary Guidelines and Nutritional Facts Objective: Describe the relationship between dietary guidelines, food groups, nutrients, and serving sizes, and interpret nutrition facts labels.	Tutorial
4	Dietary Guidelines and Nutritional Facts, continued	Tutorial
5	Nutrition and Chronic Diseases Objective: Identify the relationship between nutrition and chronic diseases such as heart disease, obesity, cancer, diabetes, hypertension, and osteoporosis.	Tutorial

### Unit 1: Personal Health, Nutrition, and Fitness—Week 3

Day	Activity/ Objective	Type
1	Nutrition and Chronic Diseases, continued	Tutorial
2	Individual Caloric and Nutritional Needs Objective: Compare and contrast caloric and nutritional needs for people of different genders, activity levels, and stages of life, and describe the effects of too many or too few calories in a diet.	Exploration
3	Individual Caloric and Nutritional Needs, continued	Exploration
4	Benefits of Physical Activity Objective: Describe the benefits of physical activity, including strength, endurance, and flexibility exercises.	Tutorial
5	Benefits of Physical Activity, continued	Tutorial

### Unit 1: Personal Health, Nutrition, and Fitness—Week 4

Day	Activity/ Objective	Type
1	Sedentary Lifestyle and Chronic Diseases Objective: Explain the relationship between a sedentary lifestyle and chronic diseases such as high cholesterol, high blood pressure, cardiovascular disease, and type 2 diabetes.	Tutorial
2	Sedentary Lifestyle and Chronic Diseases, continued	Tutorial
3	Posttest—Unit 1	Online

## Unit 2: Preventing Disease and Injury

### Unit 2: Preventing Disease and Injury—Week 4

Day	Activity/ Objective	Type
4	Pretest—Unit 2	Online
5	Immunity and Preventing Disease Objective: Investigate the causes and symptoms of communicable and non-communicable diseases, including the identification of pathogens that cause them, and identify means of treating and preventing them.	Courseware

#### Unit 2: Preventing Disease and Injury—Week 5

Day	Activity/ Objective	Type
1	Immunity and Preventing Disease, continued	Courseware
2	Immunity and Preventing Disease, continued	Courseware
3	Immunity and Preventing Disease, continued	Courseware
4	Lifesaving and Emergency Care Procedures Objective: Describe procedures for emergency care and lifesaving.	Tutorial
5	Lifesaving and Emergency Care Procedures, continued	Tutorial

#### Unit 2: Preventing Disease and Injury—Week 6

Day	Activity/ Objective	Type
1	Strategies for Preventing Accidents  Objective: Develop a list of accident-prevention strategies for a variety of circumstances, including sports, social events, and motor vehicle-related situations.	Exploration
2	Strategies for Preventing Accidents, continued	Exploration
3	Posttest—Unit 2	Online

### Unit 3: Growth, Development, and Sexuality

#### Unit 3: Growth, Development, and Sexuality —Week 6

Day	Activity/ Objective	Type
4	Pretest—Unit 3	Online
5	Human Reproduction and Development Objective: Describe the growth and development of human cells, the process of reproduction, and the stages of development from conception to adulthood.	Courseware

#### Unit 3: Growth, Development, and Sexuality—Week 7

Day	Activity/ Objective	Type
1	Human Reproduction and Development, continued	Courseware
2	Human Reproduction and Development, continued	Courseware
3	Human Reproduction and Development, continued	Courseware

4	Benefits of Healthy Sexual Practices Objective: Evaluate the physical, emotional, and social benefits of healthy sexual practices, including abstinence.	Exploration
5	Benefits of Healthy Sexual Practices, continued	Exploration

#### Unit 4: Substance Abuse

Unit 4: Substance Abuse—Week 9		
Day	Activity/ Objective	Type
1	Pretest—Unit 4	Online
2	Health Effects of Using Alcohol, Tobacco, and Other Drugs Objective: Explain the impact of alcohol, tobacco, and other drug use on one's behavior, brain chemistry, and ability to function.	Exploration
3	Health Effects of Using Alcohol, Tobacco, and Other Drugs, continued	Exploration
4	Harmful Effects of Dietary Supplements and Anabolic Steroids Objective: Analyze the harmful effects of using dietary supplements and anabolic steroids.	Tutorial
5	Effects of Medicines and Illegal Substances Objective: Describe the benefits of medicines and the risks involved in the misuse and abuse of legal and illegal drugs.	Tutorial

Unit 4: Substance Abuse—Week 10		
Day	Activity/ Objective	Type
1	Effects of Medicines and Illegal Substances, continued	Tutorial
2	Peer Pressure and Substance Abuse Objective: Evaluate the effect that peer pressure has on teenagers with regard to substance abuse.	Exploration
3	Peer Pressure and Substance Abuse, continued	Exploration
4	Sources of Help for Substance Abuse Objective: Identify sources of help for substance abuse.	Exploration
5	Sources of Help for Substance Abuse, continued	Exploration

Unit 4: Substance Abuse—Week 11		
Day	Activity/ Objective	Type
1	Posttest—Unit 4	Online

#### Unit 5: Mental Health and Community Health Issues

Unit 5: Mental Health and Community Health Issues—Week 11		
Day	Activity/ Objective	Type
2	Pretest—Unit 5	Online

3	Stress and Health Objective: Weigh the importance of managing stress to maintain health.	Tutorial
4	Depression Objective: Outline the definition, causes, and management of depression.	Tutorial
5	Depression, continued	Tutorial

Unit 5: Mental Health and Community Health Issues—Week 12		
Day	Activity/ Objective	Type
1	Mental and Emotional Health Issues Objective: Identify types of mental and emotional health issues.	Tutorial
2	Mental and Emotional Health Issues, continued	Tutorial

## International Business – also available in vCourses

### Unit 1: Introduction to Global Commerce

Many of us think of McDonald's restaurant as synonymous with America. In fact, McDonald's are all over the world, and some of their menu items even reflect the cuisine of the country they are in. In Italian McDonald's, for example, they serve gelato, and in Russia they serve Bolshoi Macs. Altering their menu is one way that McDonald's succeeds in overseas markets. This unit introduces you to some of global business's most important topics. We will discuss globalization and describe its influence on markets and production and the forces behind its growth.

### Unit 2: International Finance

Many of us think of McDonald's restaurant as synonymous with America. In fact, McDonald's are all over the world, and some of their menu items even reflect the cuisine of the country they are in. In Italian McDonald's, for example, they serve gelato, and in Russia they serve Bolshoi Macs. Altering their menu is one way that McDonald's succeeds in overseas markets. This unit introduces you to some of global business's most important topics. We will discuss globalization and describe its influence on markets and production and the forces behind its growth.

## International Business: Global Commerce in the 21<sup>st</sup> Century – also available in vCourses

From geography to culture Global Business is an exciting topic in the business community today. This course is designed to help students develop the appreciation, knowledge, skills, and abilities needed to live and work in a global marketplace. It takes a global view on business, investigating why and how companies go international and are more interconnected.

The course further provides students a conceptual tool by which to understand how economic, social, cultural, political and legal factors influence both domestic and cross-border business. Business structures, global entrepreneurship, business management, marketing, and the challenges of managing international organizations will all be explored in this course. Students will cultivate a mindfulness of how history, geography, language, cultural studies, research skills, and continuing education are important in both business activities and the 21st century.

## Introduction to Philosophy: The Big Picture— also available in vCourses

This course will take you on an exciting adventure that covers more than 2,500 years of history! Along the way, you'll run into some very strange characters. For example, you'll read about a man who hung out on street corners, barefoot and dirty, pestering everyone he met with questions. You'll learn about another eccentric who climbed inside a stove to think about whether he existed. Despite their odd behavior, these and other philosophers of the Western world are among the most brilliant and influential thinkers of all time. As you learn about these great thinkers, you'll come to see how and where many of the most fundamental ideas of Western Civilization originated. You'll also get a chance to ask yourself some of the same questions

these great thinkers pondered. By the time you've "closed the book" on this course, you will better understand yourself and the world around you...from atoms to outer space...and everything in between.

### Law & Order: Introduction to Legal Studies— *also available in vCourses*

Every society has laws that its citizens must follow. From traffic laws to regulations on how the government operates, laws help provide society with order and structure. Our lives are guided and regulated by our society's legal expectations. Consumer laws help protect us from faulty goods; criminal laws help to protect society from individuals who harm others; and family law handles the arrangements and issues that arise in areas like divorce and child custody. This course focuses on the creation and application of laws in various areas of society. By understanding the workings of our court system, as well as how laws are actually carried out, we become more informed and responsible citizens in our communities and of our nation.

### Music Appreciation: The Enjoyment of Listening— *also available in vCourses*

Music is part of everyday lives and reflects the spirit of our human condition. To know and understand music, we distinguish and identify cultures on local and global levels. This course will provide students with an aesthetic and historical perspective of music, covering a variety of styles and developments from the Middle Ages through the Twentieth First Century. Students will acquire basic knowledge and listening skills, making future music experiences more informed and satisfying.

### Personal & Family Finance— *also available in vCourses*

How do our personal financial habits affect our financial future? How can we make smart decisions with our money in the areas of saving, spending, and investing? This course introduces students to basic financial habits such as setting financial goals, budgeting, and creating financial plans. Students will learn more about topics such as taxation, financial institutions, credit, and money management. The course also addresses how occupations and educational choices can influence personal financial planning, and how individuals can protect themselves from identity theft.

### Personal Psychology I: The Road to Self-Discovery— *also available in vCourses*

Self-knowledge is the key to self-improvement! More than 800,000 high school students take psychology classes each year. Among the different reasons, there is usually the common theme of self-discovery! Sample topics include the study of infancy, childhood, adolescence, perception and states of consciousness. Amazing online psychology experiments dealing with our own personal behavior are featured within this course.

### Personal Psychology II: Living in a Complex World— *also available in vCourses*

Enrich the quality of your life by learning to understand the actions of others! Topics include the study of memory, intelligence, emotion, health, stress and personality. This courses features exciting online psychology experiments involving the world around us.

### Physical Education – *also available in vCourses*

#### Unit 1: Getting Active

Unit 1: Getting Active		
Day	Activity / Objective	Type
1	Pretest—Unit 1	Assessment

2–7	Introduction to Physical Education Objective: Study the benefits of physical fitness and leading an active lifestyle.	Lesson
8–13	Safety and Injury Prevention Objective: Examine the types of injuries associated with regular exercise and how to prevent them.	Lesson
14–19	Introduction to Sports Objective: Study the rules of basic game play and discover the health benefits derived from participation in sports.	Lesson
20–25	Basics of Physical Activity and Exercise Objective: Analyze types of physical activity in terms of their contribution to fitness, health, and wellness.	Lesson
26–30	Unit Activity—Unit 1	Unit Activity
31	Posttest—Unit 1	Assessment

### Unit 2: Improving Performance

Unit 2: Improving Performance		
Day	Activity / Objective	Type
32	Pretest—Unit 2	Assessment
33–38	Cardiorespiratory Fitness and Endurance Objective: Study the importance of cardiorespiratory fitness and cardiorespiratory endurance to overall health and wellness.	Lesson
39–44	Muscular Strength and Endurance Objective: Study the importance of muscular fitness and muscular endurance to overall health and wellness.	Lesson
45–50	Flexibility Objective: Explain flexibility and summarize different methods to measure and improve it.	Lesson
51–56	Biomechanics and Movement Objective: Identify and describe the basic principles of biomechanics.	Lesson
57–61	Unit Activity—Unit 2	Unit Activity
62	Posttest—Unit 2	Assessment

### Unit 3: Lifestyle

Unit 3: Lifestyle		
Day	Activity / Objective	Type
63	Pretest—Unit 3	Assessment
64–69	Lifestyle Fitness Objective: Evaluate influences that can affect physical activity and lifelong exercise preferences.	Lesson
70–75	Designing a Personal Fitness Program Objective: Design a personal fitness program using the FITT principle.	Lesson
76–79	Effects of Media and Culture Objective: Explore the impact of cultural and media perceptions on physical activity and identify career opportunities in sports, fitness, and health care.	Lesson

80–83	Evolution of Sports Objective: Describe the development of sports and summarize the impact of globalization and technology on the sports industry.	Lesson
84–88	Unit Activity—Unit 3	Unit Activity
89	Posttest—Unit 3	Assessment
90	End-of-Semester Test	Assessment

## Principles of Architecture and Construction

This interactive course empowers students with the knowledge to appreciate and evaluate career opportunities in architecture and construction. With an emphasis on developing critical thinking skills, this one semester course includes a variety of activities as students learn about structures and loads, materials and costs, urban design, and other aspects of these fascinating career opportunities. This easy-to-manage course will help build a solid foundation for their career options.

## Principles of Engineering and Technology

This easy-to-manage course provides students with essential STEM knowledge and an effective overview of STEM careers. The course's 15 lessons are interspersed with activities and online discussions that engage learners and promote understanding and achievement. Topics covered include biotechnology, mechanics, and fluid and thermal systems. The concluding lesson provides a valuable overview of the overall engineering design process.

## Principles of Finance

Financial literacy is an increasingly essential capability as students prepare for the workforce, and this 18 lesson course provides the information they need to determine if a career in finance is right for them. The course uses games and online discussions to effectively facilitate learning, while introducing your learners to a variety of topics, including investment strategies, money management, asset valuation, and personal finance.

## Principles of Health Science

With an engaging and interactive instructional approach, this rigorous course provides your students with a comprehensive overview of health science topics and careers. Health science professionals are in increasing demand and of increasing interest, and this semester-long course is an effective way to introduce students to the wide array of health science careers. Beginning with medical terminology, the course includes an overview of physiology and human homeostasis and more.

## Principles of Information Technology – 1A

This course develops practical skills in the ever-expanding IT industry. The course includes lessons that cover the increasingly relevant and important areas of privacy and data security, as well as addressing some essential skills such as word processing and spreadsheet software, and then advancing to cutting edge networking and database software concepts.

## Principles of Law, Public Safety, Corrections, and Security

For many reasons, high school students are drawn to learning about the careers addressed in this course. This one-semester course includes 15 lessons that help students learn about careers that make a powerful impact in all of our lives. From criminal law to every phase of the trial process, the course moves on to include lessons on the correctional system and the implications of legal ethics and the constitution.

### Real World Parenting– also available in vCourses

What is the best way to care for children and teach them self-confidence and a sense of responsibility? Parenting involves more than having a child and providing food and shelter. Learn what to prepare for, what to expect, and what vital steps parents can take to create the best environment for their children. Parenting roles and responsibilities, nurturing and protective environments for children, positive parenting strategies, and effective communication in parent/child relationships are some of the topics covered in this course.

### Social Problems I: A World in Crisis– also available in vCourses

Students will become aware of the challenges faced by social groups, as well as learn about the complex relationship among societies, governments and the individual. Each unit is focused on a particular area of concern, often within a global context. Possible solutions at both the structural level as well as that of the individual will be examined. Students will not only learn more about how social problems affect them personally, but begin to develop the skills necessary to help make a difference in their own lives and communities, not to mention globally.

### Social Problems II: Conflicts, Crisis, & Challenges– also available in vCourses

The Social Problems II course continues to examine timely social issues affecting individuals and societies around the globe. Students learn about the overall structure of the social problem as well as how it impacts their lives. Each unit focuses on a particular social problem, including racial discrimination, drug abuse, the loss of community, and urban sprawl, and discusses possible solutions at both individual and structural levels. For each issue, students examine the connections in the global arena involving societies, governments and the individual.

### Sociology I: The Study of Human Relationships– also available in vCourses

The world is becoming more complex. How do your beliefs, values and behavior affect the people around you and the world in which we live? Students will examine social problems in our increasingly connected world, and learn how human relationships can strongly influence and impact their lives. Exciting online video journeys to an array of areas in the sociological world are an important component of this relevant and engaging course.

### Sociology II: Your Social Life– also available in vCourses

Sociology is the study of people, social life and society. By developing a “sociological imagination” students will be able to examine how society itself shapes human action and beliefs...and how in turn these factors reshape society itself! Fascinating online videos journeys will not only inform students, but motivate them to still seek more knowledge on their own.

## Global Languages

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### Latin I – Semesters A and B

Students begin their introduction to Latin with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. The course consists of 180 lesson days formatted in an intuitive calendar view, which can be divided into two 90-day semesters and represents an ideal blend of language learning pedagogy and online learning. As students begin the course, they construct their own Avatar that accumulates •Avatar bucks .by performing well on course tasks.to use

to purchase items (virtual clothing, gadgets, scenery, etc.) at the •\Avatar store. Each week consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

## Latin II – Semesters A and B

Students continue their introduction to Latin with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. The course consists of 180 lesson days formatted in an intuitive calendar view, which can be divided into two 90-day semesters and represents an ideal blend of language learning pedagogy and online learning. As students begin the course, they construct their own Avatar that accumulates —Avatar bucks—by performing well on course tasks—to use to purchase items (virtual clothing, gadgets, scenery, etc.) at the —Avatar store. Each week consists of a new vocabulary theme and grammar concept, a notable ancient myth in Latin, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and cultural presentations covering significant aspects of Roman culture or their modern-day manifestations, and assessments. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

## Spanish I – Semesters A and B

Students begin their introduction to Spanish with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. The course consists of 180 lesson days formatted in an intuitive calendar view, which can be divided into two 90-day semesters and represents an ideal blend of language learning pedagogy and online learning. As students begin the course, they construct their own Avatar that accumulates —Avatar bucks—by performing well on course tasks—to use to purchase items (clothing, gadgets, scenery, etc.) at the —Avatar store. Each week consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major Spanish-speaking areas in Europe and the Americas. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

## Spanish II – Semesters A and B

Students continue their introduction to Spanish with fundamental building blocks in four key areas of foreign language study: listening comprehension, speaking, reading, and writing. The course consists of 180 lesson days formatted in an intuitive calendar view, which can be divided into two 90-day semesters and represents an ideal blend of language learning pedagogy and online learning. The course exemplifies a marriage of the best in language learning pedagogy and online learning. As students begin the course, they construct their own Avatar that accumulates “Avatar bucks”—by performing well on course tasks—to use to purchase materials (clothing, gadgets, scenery, etc.) at the “Avatar store”. Each week consists of an ongoing adventure story, a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, cultural presentations covering major Spanish-speaking areas in Europe and the Americas, and assessments. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

## Spanish III – Semesters A and B

In this expanding engagement with Spanish, students deepen their focus on four key skills in foreign language acquisition: listening comprehension, speaking, reading, and writing. In addition, students read significant works of literature in Spanish, and respond orally or in writing to these works. The course consists of 180 lesson days formatted in an intuitive calendar view, which can be divided into two 90-day semesters and represents an ideal blend of language learning pedagogy and online learning. As students begin the course, they construct their own Avatar that accumulates •\Avatar bucks. by performing well on course tasks.to use to purchase items (virtual clothing, gadgets, scenery, etc.) at the •\Avatar store.. Continuing the pattern, and building on what students encountered in the first two years, each week consists of a new vocabulary theme and grammar concept, numerous interactive games reinforcing vocabulary and grammar, reading and listening comprehension activities, speaking and writing activities, and multimedia cultural presentations covering major Spanish-speaking areas in Europe and the Americas. The course has been carefully aligned to national standards as set forth by ACTFL (the American Council on the Teaching of Foreign Languages).

## Advanced Spanish – AP\* Edition

The majority of the course is conducted almost entirely in Spanish. The tips and grammar tutorials are a mix of Spanish and English to aid in the student's comprehension of the material since this is an online course. The course is divided into ten units. Each semester includes four content units and one semester review and test. The last unit of the second semester is a review specifically for the AP Exam. Each unit is based on an overall theme, and highlights a specific country or region of the Hispanic world. Each unit is divided into three lessons and a unit wrap-up. Each lesson contains approximately ten to twelve activities. Although this course is completely online, you will have a teacher who will be available to answer any questions you might have regarding the course and the content. The teacher will also be correcting your assignments and any audio or essay submissions.

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**Subject:** Additional information related to March 7 letter

**From:** Johanna Medina <Johanna.Medina@asbcs.az.gov>

**Date:** Wed, Mar 12, 2014 4:58 pm

**To:** Johanna Medina <Johanna.Medina@asbcs.az.gov>

**Cc:** Johanna Medina <Johanna.Medina@asbcs.az.gov>

To Charter Representatives with Alternative Schools,

On March 7, I provided you with charter information guidance for alternative school status recertification. In the letter, I identified the need for the charter's mission and program of instruction in the contract, as amended, to be in alignment. It has come to our attention that the Program of Instruction Amendment Request requires a Demonstration of Sufficient Progress (DSP) to be submitted by all charter holders not meeting the Board's academic performance expectations, or with Associated Schools with a current overall rating of Does Not Meet, Falls Far Below, or NR. For the purposes of bringing the program of instruction in the charter contract into alignment with the charter mission and current practice for recertification, a Program of Instruction Amendment may be submitted without including any DSP documents during the expedited review timeframe, which ends March 17, 2014.

Feel free to call me with any questions at 602-364-3084 or email me at [johanna.medina@asbcs.az.gov](mailto:johanna.medina@asbcs.az.gov).

Sincerely,

*Johanna Medina*

Johanna Medina

Director of School Quality

Arizona State Board for Charter Schools

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