



Pacific Charter Institute

MILLENNIAL READY

COURSE CATALOG



Also available online at
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History / Social Science (“a”)

Course	CP Government	PCI Course #	711506
Grade Level	11-12	Alternate #	2703
UC/CSU Approved?	History / Social Science Area “a”	Duration/Credits	1 semester – 5 credits
Prerequisite	None	Credit Type	GOVERNMENT

Course Description: Students will be examining what is required for citizenship and what citizenship means, how our government functions, the historical significance of how our government was formed, and how and why our government is different from other countries. In this course students will be answering the fundamental question – “What does it mean to be an American?” Students will use online resources, current events, the textbook, discussions, research projects, and assessments to demonstrate their understanding of these concepts. This college prep independent study course includes a midterm and final. Please note, not all chapters in the textbook are covered due to the limited time frame in a one semester course.

Course	CP Economics	PCI Course #	711505
Grade Level	10-12	Alternate #	
UC/CSU Approved?	College-Prep Elective Area “g”	Duration/Credits	1 semester – 5 credits
Prerequisite	None	Credit Type	ECONOMICS

Course Description: Students will explore fundamental economics, international economics, microeconomics and macroeconomic concepts. Students will use online resources, novels, current events, discussions, projects, and textbook materials to study topics such as, but not limited to, Economic Systems and Decision Making, Supply and Demand, Market Structures, Business Organizations, Economic performances and Economic Instability. Weekly discussions and assessments will be used to demonstrate students' understanding of these concepts. Students will complete a project called "The Life Project" over the course of this semester with one assignment per week. This is designed to assist them in considering their financial future. The project consists of various “real world” situations/decisions they will be faced with once entering the workforce. Students will create a budget that demonstrates what they feel is the best use of their income. Many of the activities require students to research information and some even require them to go into various institutions to obtain applications or information.

Course	CP US History	PCI Course #	711503
Grade Level	9-12	Alternate #	
UC/CSU Approved?	History / Social Science Area “a”	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	USHISTORY

Course Description: In this two-semester, college preparatory course students will examine the major turning points in American history in the 20th century. They will review the nation's beginnings, democratic ideals, and industrial transformation. They will cover a series of thematic units: the Progressive Era, the Jazz Age, the Great Depression, World War I, World War II, the Cold War, Civil Rights Movement, the Vietnam Era, and contemporary American society. This course features the use of historical novels and project based assessments. A state adopted textbook and teacher-administered exams and essays are among the various means of instruction and evaluation.

This college preparatory course will cover all of the California State Content Standards for United States History using personal investigation of historical events and development of themes using literature, travel to historical sites, map study, primary sources, research and thematic projects to achieve the course objectives.

Course	CP World History	PCI Course #	711501
Grade Level	9-12	Alternate #	
UC/CSU Approved?	History / Social Science Area “a”	Duration/Credits	1 yr. – 10 credits
Prerequisite		Credit Type	WORLDHISTORY

Course Description: This is a 10-credit, two-semester, College Prep independent study course with a midterm and final in each semester. The course entails two units per semester, and begins with a brief look at the ancient world, then plunges into world changing revolutions, industrialization, imperialism, the World Wars, and our contemporary world. Students will use online resources, current events, the textbook, novels, primary sources, maps, discussions, research projects, and assessments to answer essential questions and demonstrate their understanding of these historical events and their significance to our world today.

Course	CP World Geography	PCI Course #	711504
Grade Level	9-12	Alternate #	
UC/CSU Approved?	History / Social Science Area “a”	Duration/Credits	1 semester – 5 credits
Prerequisite	None	Credit Type	WORLDGEOGRAPHY

Course Description: Students build knowledge of a global perspective with emphasis on how geography affects societies and focus on non-western history and culture. This course requires students to develop geographic literacy, analytical writing and research skills, map reading, and presentation skills as well as form an understanding of the socio-economic issues in non-western culture. Emphasis is put on cultural components and values, such as religion, science/technology, art, social systems, politics, and economics. Students also address contemporary issues confronting non-western culture, such as trade, developing countries and regions, urbanization, and conservation of natural resources, to develop their role as a global citizen. Knowledge and application of the research process are illustrated through a variety of activities including novel reading, critical writing and research papers, and oral presentations. The course curriculum and assessments are designed for college preparatory students.

English ("b")

Course	CP English 9	PCI Course #	711009
Grade Level	9	Alternate #	
UC/CSU Approved?	English ("b") / English	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	ENGLISH9

Course Description: College Prep English 9 is the first in a series of four such courses that develops student's skills and strategies in reading, writing, and language through the analysis of complex narrative and expository texts. By engaging in regular written and oral analysis activities, students will read and understand texts from varied genres, time periods and perspectives. They will write and speak in multiple modes and to address a variety of purposes as they seek to synthesize and express the complex ideas they are exploring. Students will work both independently and cooperatively to accomplish daily tasks as well as demonstrate their acquired knowledge and skills through capstone projects. They will also become proficient givers and receivers of critical feedback on the elements of good writing and effective communication through multiple media and for varied purposes and audiences. Finally, this course is intended to stimulate students' imaginations and intellectual curiosity.

Course	CP English 10	PCI Course #	711010
Grade Level	10	Alternate #	
UC/CSU Approved?	English ("b") / English	Duration/Credits	1 yr. – 10 credits
Prerequisite	English 9	Credit Type	ENGLISH10

Course Description: CP English 10 is the second in a series of four such courses that continues to develop students' skills and strategies in reading, writing, and language through the analysis of complex narrative and expository texts. By engaging in regular written and oral analysis activities, students will read and understand texts from varied genres, with a focus on selections with a modern historical connection. They will write and speak in multiple modes and to address a variety of purposes as they seek to synthesize and express the subtleties, ambiguities, and inferences that they are discovering as readers. Students will work both independently and cooperatively to accomplish daily tasks as well as demonstrate their acquired knowledge and skills through capstone projects. They will also sharpen their skills as givers and receivers of critical feedback on the elements of good writing and effective communication through multiple media and for varied purposes and audiences. Finally, this course will continue to stimulate students' imaginations and intellectual curiosity and to foster strong cross-curricular connections.

Course	CP English 11	PCI Course #	711011
Grade Level	11	Alternate #	
UC/CSU Approved?	English ("b") / English	Duration/Credits	1 yr. – 10 credits
Prerequisite	English 9 and 10	Credit Type	ENGLISH11

Course Description: This college preparatory English course consists of a progression of six thematic units through which students will interpret and evaluate representative texts of literature of the United States in their continued development of literacy skills learned in ninth and tenth grade English. Through their reading, research, and writing endeavors, students focus on the varied experiences of many cultural groups, including but not limited to early Puritan Settlers, African Americans, and

immigrant groups. Students will learn about the major literary movements (romanticism, transcendentalism and realism) and study some of the authors who have contributed significantly to the development of American literature in its different aspects. Reading and learning about American literature is synonymous with understanding the history and culture of a nation that has undergone dramatic social, economic, and cultural change in its relatively short history. Students will examine and analyze representative texts in a variety of literary genres (e.g., novels, poems, essays, plays, foundational U.S. documents) for content, form, style, diction, and contemporary relevance, adding new terminology and depth to their analytical repertoire. Students will develop strategies for reading complex literature, literary non-fiction, and informational texts critically and analytically and to write substantial, well-reasoned, and effectively supported argumentative and informative/explanatory essays. The course emphasizes the mastery of critical reading and communication skills that students need for career and college readiness.

Course	CP English 12	PCI Course #	711012
Grade Level	12	Alternate #	
UC/CSU Approved?	English ("b") / English	Duration/Credits	1 yr. – 10 credits
Prerequisite	English 9, 10 & 11	Credit Type	ENGLISH12

Course Description: This senior English course is comprised of an examination of British literature, advanced vocabulary and language study, and practice in analytical and expository writing and research skills to prepare students for higher education. The survey of literature covers the rich heritage of major writers of the British Isles, as well as from countries that were once part of the British Empire, from the Anglo-Saxon period to the present--a span of time of over 1,500 years. The goal of the course is to increase student appreciation for the British heritage and influence on literature, as well as to recognize the value of literary analysis in observing cultural trends and influences. Lessons and tasks focus on the development of skillful discrimination and use of sources rather than simply acquiring knowledge. At least four full-length books will be read in addition to many selections of prose, poetry, and drama in the literature anthology. The units of study guide students toward developing strong analytical reading skills, critical thinking and writing skills, and academic discussion skills which enable them to participate effectively in intellectual exchanges.

Course	CP Expository Reading & Writing	PCI Course #	711015
Grade Level	12	Alternate #	
UC/CSU Approved?	English ("b") / English	Duration/Credits	1 yr. – 10 credits
Prerequisite	English 9, 10 & 11	Credit Type	ENGLISH12

Course Description: The goal of the Expository Reading and Writing Course (ERWC) is to prepare college-bound seniors for the literacy demands of higher education. Students in this yearlong, rhetoric-based course develop advanced proficiency in expository, analytical, and argumentative reading and writing. The cornerstone of the course—the ERWC Assignment Template—presents a scaffolded process for helping students read, comprehend, and respond to nonfiction and literary texts. The twelve instructional modules in the ERWC—from which adopting schools select eight-to-ten—are organized by semester. Most modules include multiple reading selections on a topic, often representing different genres. Course texts include contemporary essays, newspaper and magazine articles, editorials, reports, interviews, memos, assorted public documents, scholarly studies, and other nonfiction texts. Three modules include full-length works—a work of nonfiction in semester one and two novels in semester two. Adopting schools must select one full-length work in each semester. Schools are strongly encouraged to select modules in sequence and to consider the balance of text types and writing assignments in the eight-to-ten modules they select. All modules integrate text-based grammar study with rhetorical reading and writing; schools are strongly encouraged to incorporate these lessons based on the needs of their students. Modules also provide instruction in

research methods and documentation conventions. Students will be expected to increase their awareness of the rhetorical strategies employed by authors and to apply those strategies to their own writing. They will read closely to examine the relationship between an author’s argument or theme and his or her audience and purpose; to analyze the impact of structural and rhetorical strategies; and to examine the social, political, and philosophical assumptions that underlie the text. By the end of the course, students will be expected to use this process independently when reading unfamiliar texts and writing in response to them.

Mathematics (“c”)

Course	CP Algebra 1	PCI Course #	710073
Grade Level	9-12	Alternate #	
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Math 8 or Pre-Algebra	Credit Type	ALGEBRA

Course Description: Algebra is a branch of mathematics that uses symbols in place of numbers to describe and generalize relationships. In Algebra 1A, you will explore relationships between mathematical quantities, how to reason with equations and inequalities, graphing, functions, and mathematical modeling. You will build on your knowledge of variables, exponents, expressions, and algebraic terminology by applying algebra to real-world situations.

In Algebra 1B you’ll extend these ideas to factor and perform operations on polynomial expressions containing more than two terms. Many of the equations that you solved in Algebra 1A were linear, or proportional. In Algebra 1B you’ll solve quadratic equations. In quadratic equations, the highest power on a variable is 2. You’ll study the parabola, a conic section defined by a quadratic equation. You’ll build your graphing skills by analyzing and plotting different types of functions: absolute value functions, piecewise functions, exponential functions, and logarithmic functions. Finally, you’ll study statistics as you interpret the shapes of data distributions and delve into correlation and causation.

Course	CP Algebra 2	PCI Course #	710074
Grade Level	9-12	Alternate #	2404
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Algebra 1	Credit Type	ALGEBRA

Course Description: Algebra is a branch of mathematics that uses symbols in place of numbers to describe and generalize relationships. You have worked with rational numbers in prior courses. In Algebra 2A, you will perform operations and identify restrictions on rational expressions (expressions that contain rational numbers as coefficients). You will also analyze and graph polynomial functions. Algebra 2A will introduce you to a new concept, complex numbers. Complex numbers rely on an imaginary unit, i , where $i^2 = -1$. You will plot complex numbers in the complex number plane and solve quadratic equations in the complex number system. In Algebra 2B, you will begin with trigonometry, which is the study of how the sides and angles of a triangle are related. You will examine trigonometric functions and graphs in the context of the unit circle. You will extend your understanding of lines by classifying systems of linear equations. In prior courses, you solved inequalities by graphing. Here, you will solve systems of inequalities, including quadratic and absolute value inequalities that contain restrictions on the variable. You will finish Algebra 2B by applying statistics and probability to make complex decisions. You’ll reach decisions based on representative sampling from a population and by creating and evaluating statistical models.

Course	CP Geometry	PCI Course #	710072
Grade Level	9-12	Alternate #	2413
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Algebra 1	Credit Type	MATH

Course Description: Geometry is a branch of mathematics that uses logic and formal thinking to establish mathematical relationships between points, lines, surfaces, and solids. In Geometry A, you will explore rigid and non-rigid transformations of figures in the coordinate plane and use them to establish congruence and similarity of triangles and other shapes. You will also prove theorems about lines, angles, triangles, and parallelograms, and build geometric constructions using both basic tools and

modern technology. In conclusion, you will apply your knowledge of triangles as you investigate the mathematics of trigonometry.

In Geometry B, you will review the volume formulas for some common solid figures as you extend your knowledge of two-dimensional shapes to three-dimensional shapes. You will also transition from primarily Euclidean geometry to analytical geometry—a segment of geometry focused on numerical measurements and coordinate algebra. You will use analytical geometry and observations to investigate the properties of circles and constructions related to circles. Geometry B closes with a study of independent and conditional probability and how you can use probability models to represent situations arising in everyday life.

Course	CP Calculus	PCI Course #	710082
Grade Level	9-12	Alternate #	2415
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Integrated Math 3 or Pre-Calculus	Credit Type	MATH

Course Description: Calculus is the mathematics of change. It is used to solve complex problems that are continuously evolving and would otherwise be unsolvable with only algebra and geometry. This online advanced placement course is designed to prepare students to become deep mathematical thinkers. They will explore the calculus concepts of limits, differentiation, and integration and apply those concepts in meaningful ways. The course is split into two semesters. The first semester focuses on the concepts of functions, limits, and differentiation and their applications. The second semester builds off the first semester to focus on integrations. It will cover topics such as the definite and indefinite integral and their applications, inverse function, and techniques for integrating.

Course	CP Integrated Math 1	PCI Course #	715564
Grade Level	9-12	Alternate #	2403
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Math 8 or Pre-Algebra	Credit Type	ALGEBRA

Course Description: Integrated Math 1 addresses the California Common Core State Standards for Mathematics for the Integrated Mathematics pathway. The program places equal emphasis on conceptual understanding and procedural fluency, while also focusing on depth of instruction and coherent articulation across grade levels. The program is organized around the Critical Areas of the CCSS and promotes depth of understanding via interactive lessons, research-based instructional approaches, best practices, and effective differentiation. Comprehensive digital resources support students, teachers, administrators, and parents, and help build 21st-century skills.

The Integrated Math 1 course helps prepare students for the Smarter Balanced Assessments through a digital adaptive assessment, intervention, and acceleration system that provides learning tools and real-time feedback to students, and reports student and classroom achievement to instructors. This program allows students to interactively explore new concepts through the Explore Activities, virtual manipulatives, Animated Math tutorials, video tutorials, and Personal Math Trainer’s scaffolder assessment support. It also reinforces the Common Core Standards with Teacher Editions that provide Professional Learning with a focus on teaching for depth, and strategies for incorporating the Mathematical Practices into every lesson, as well as Professional Development videos modeling best practices in a classroom. Finally, the Integrated Math 1 course delivers the next generation interactive digital Student Edition and offers write-in functionality and note-taking capabilities and contains point-of-use links to Math on the Spot Video Tutorials, Animated Math activities and simulations, and Personal Math Trainer online practice and help.

Course	CP Integrated Math 2	PCI Course #	715565
Grade Level	9-12	Alternate #	2425
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Integrated Math 1 or Algebra 1 & Geometry	Credit Type	MATH

Course Description: Integrated Math 2 addresses the California Common Core State Standards for Mathematics for the Integrated Mathematics pathway. The program places equal emphasis on conceptual understanding and procedural fluency, while also focusing on depth of instruction and coherent articulation across grade levels. The program is organized around the Critical Areas of the CCSS and promotes depth of understanding via interactive lessons, research-based instructional approaches, best practices, and effective differentiation. Comprehensive digital resources support students, teachers, administrators, and parents, and help build 21st-century skills.

The Integrated Math 2 course helps prepare students for the Smarter Balanced Assessments through a digital adaptive assessment, intervention, and acceleration system that provides learning tools and real-time feedback to students, and reports student and classroom achievement to instructors. This program allows students to interactively explore new concepts through the Explore Activities, virtual manipulatives, Animated Math tutorials, video tutorials, and Personal Math Trainer’s scaffolded assessment support. It also reinforces the Common Core Standards with Teacher Editions that provide Professional Learning with a focus on teaching for depth, and strategies for incorporating the Mathematical Practices into every lesson, as well as Professional Development videos modeling best practices in a classroom. Finally, the Integrated Math 2 course delivers the next generation interactive digital Student Edition and offers write-in functionality and note-taking capabilities and contains point-of-use links to Math On the Spot Video Tutorials, Animated Math activities and simulations, and Personal Math Trainer online practice and help.

Course	CP Integrated Math 3	PCI Course #	715566
Grade Level	9-12	Alternate #	
UC/CSU Approved?	Mathematics Area “c”	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Integrated Math 2	Credit Type	MATH

Course Description: Integrated Math 3 addresses the California Common Core State Standards for Mathematics for the Integrated Mathematics pathway. The program places equal emphasis on conceptual understanding and procedural fluency, while also focusing on depth of instruction and coherent articulation across grade levels. The program is organized around the Critical Areas of the CCSS and promotes depth of understanding via interactive lessons, research-based instructional approaches, best practices, and effective differentiation. Comprehensive digital resources support students, teachers, administrators, and parents, and help build 21st-century skills.

The Integrated Math 3 course helps prepare students for the Smarter Balanced Assessments through a digital adaptive assessment, intervention, and acceleration system that provides learning tools and real-time feedback to students, and reports student and classroom achievement to instructors. This program allows students to interactively explore new concepts through the Explore Activities, virtual manipulatives, Animated Math tutorials, video tutorials, and Personal Math Trainer’s scaffolded assessment support. It also reinforces the Common Core Standards with Teacher Editions that provide Professional Learning with a focus on teaching for depth, and strategies for incorporating the Mathematical Practices into every lesson, as well as Professional Development videos modeling best practices in a classroom. Finally, the Integrated Math 3 course delivers the next generation interactive digital Student Edition and offers write-in functionality and note-taking capabilities and contains point-of-use links to Math On the Spot Video Tutorials, Animated Math activities and simulations, and Personal Math Trainer online practice and help.

Course	CP Pre-Calculus	PCI Course #	712996
Grade Level	9-12	Alternate #	2414
UC/CSU Approved?	Mathematics "c" / Advanced Mathematics	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Algebra 2	Credit Type	MATH

Course Description: This college preparatory course complements and expands the mathematical content and concepts of Algebra I, Geometry, and Algebra II. Students who master Pre-Calculus will gain experience in the solutions of problems in various content areas, including polynomial, logarithmic, trigonometric, and exponential functions, as well as systems of linear and non-linear equations and inequalities.

Course	CP Probability & Statistics	PCI Course #	710068
Grade Level	9-12	Alternate #	
UC/CSU Approved?	Mathematics Area "c"	Duration/Credits	1 yr. – 10 credits
Prerequisite	Completion of Algebra 2 or equivalent	Credit Type	MATH

Course Description: Probability and Statistics is a mathematics course that teaches two related, but distinguishable disciplines. Probability is the study of the likelihood that an event will occur. For example, what is the likelihood that you will win a writing contest if there are 3,000 entries? What are the chances that you will land that lead role in the school play if 30 students audition? In statistics, you will practice the science of collecting and analyzing numerical data in order to make decisions. The study of statistics upholds that of probability. You've likely worked with both disciplines to varying degrees during your math education. In this course, you will represent and interpret data using dot plots, histograms, box plots, two-way frequency tables, and scatter plots. You will study normal distributions and distinguish between correlation and causation. You will also determine the conditional probability of two events or whether the events are independent. Using counting techniques and the rules of probability, you will calculate probabilities and use the results to make educated and fair decisions. You will evaluate several data collection techniques and statistical models, including simulations. The course closes with information on how you can use probability models to represent situations arising in everyday life that involve both payoff and risk.

Laboratory Science (“d”)

Course	CP Physical Science	PCI Course #	716714 / 716675
Grade Level	9 -10	Alternate #	
UC/CSU Approved?	Laboratory Science (“d”) / Physical Science	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	PHYSICALSCIENCE

Course Description: This is an introductory course in the foundations of physical science where emphasis is placed on the Next Generation Science Standards. The laboratory work will provide students with sound laboratory techniques and engineering practices to ensure that students develop reasoning power and the ability to apply physical science principles to their course work in preparation for their college experiences. The course is standards-based meaning that content is focused on the Next Generation Science Standards and are taught using multiple methods including lecture, laboratory work, inquiry, technology, critical reading, research, and engineering applications. Performance expectations emphasize students' demonstrating an understanding and ability to use Science and Engineering Practices, Crosscutting Concepts, and selective disciplinary Core Ideas in HS Physical Science; HS Earth and Space Science; and HS Engineering, Technology and Applications Science.

Course	CP Biology	PCI Course #	710303 / 716608
Grade Level	9 -10	Alternate #	
UC/CSU Approved?	Laboratory Science (“d”) / Biology / Life Sciences	Duration/Credits	1 yr. – 10 credits
Prerequisite	Algebra 1 or Integrated Math 1	Credit Type	LIFESCIENCE

Course Description: This is an introductory course in the foundations of Biology where emphasis is placed on the Next Generation Science Standards. The Laboratory work will provide students with sound laboratory techniques, scientific investigation, and engineering practices to ensure that students develop reasoning power and critical thinking skills to their course work in preparation for their college experiences. The course is standards-based meaning that content is focused on the Next Generation Science Standards and are taught using multiple methods including lecture, laboratory work, inquiry, technology, critical reading, research, and engineering applications. Performance expectations emphasize students' demonstrating an understanding and ability to use Science and Engineering Practices, Crosscutting Concepts, and all disciplinary Core Ideas in HS Life Science with selective core ideas in HS Earth and Space Science, and HS Engineering, Technology and Applications Science.

Course	CP Chemistry	PCI Course #	710305
Grade Level	10 - 12	Alternate #	
UC/CSU Approved?	Laboratory Science (“d”) / Chemistry	Duration/Credits	1 yr. – 10 credits
Prerequisite	Biology, Algebra 1, Integrated Math 1	Credit Type	PHYSICALSCIENCE

Course Description: This is an introductory course in the foundations of chemistry where emphasis is placed on the Next Generation Science Standards. The Laboratory work will provide students with sound laboratory techniques and engineering practices to ensure that students develop reasoning power and the ability to apply chemistry principles to their course work in preparation for their college experiences. The course is standards-based meaning that content is focused on the Next Generation Science Standards and are taught using multiple methods including lecture, laboratory work, inquiry, technology, critical reading, research, and engineering applications. Performance expectations emphasize students' demonstrating an understanding and ability to use Science and Engineering Practices, Crosscutting Concepts, and selective disciplinary Core Ideas in HS Physical Science; HS Earth and Space Science; and HS Engineering, Technology and Applications Science.

Course	CP Physics	PCI Course #	710306
Grade Level	10 - 12	Alternate #	
UC/CSU Approved?	Laboratory Science (“d”) / Physics	Duration/Credits	1 yr. – 10 credits
Prerequisite	Algebra 1 or Integrated Math 1, Geometry	Credit Type	PHYSICALSCIENCE

Course Description: This is an introductory course in the foundations of physics where emphasis is placed on the Next Generation Science Standards. The laboratory work will provide students with sound laboratory techniques and engineering practices to ensure that students develop reasoning power and the ability to apply physics principles to their course work in preparation for their college experiences.

The course is standards-based meaning that content is focused on the Next Generation Science Standards and are taught using multiple methods including lecture, laboratory work, inquiry, technology, critical reading, research, and engineering applications. Performance Expectations emphasize students' demonstrating an understanding and ability to use Science and Engineering Practices, Crosscutting Concepts, and selective disciplinary Core ideas in HS Physical Science; HS Earth and Space Sciences; and HS Engineering, Technology, and Applications of Science.

Language Other than English (“e”)

Course	CP Spanish 1	PCI Course #	710401
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 1 Spanish	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: In Spanish 1A, you'll be introduced to several common situations in which people communicate, such as exchanging names and greetings, describing people by physical and personality traits, and describing family members and aspects of your social life. You'll start with basic sentence structures and grammatical tools, and you'll learn to communicate by listening, speaking, reading, and writing in Spanish as you internalize new vocabulary and grammar. You'll also learn about some regions of the Spanish-speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your Spanish studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

In Spanish 1B, you'll be introduced to several common situations in which people describe how to earn, save, and manage money, modes of urban transportation, various seasons and the associated weather conditions, food, clothes, and activities. You'll also describe various art forms, plays, concerts, and movies. You'll discuss health and well-being and travel and tourism. You'll build on what you learned in the Spanish 1B course to communicate by listening, speaking, reading, and writing in Spanish as you internalize new vocabulary and grammar. You'll also learn about some regions of the Spanish-speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your Spanish studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

Course	CP Spanish 2	PCI Course #	710402
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 2 Spanish	Duration/Credits	1 yr. – 10 credits
Prerequisite	Spanish 1 or Equivalent	Credit Type	FL/VPA/CTE

Course Description: In Spanish 2A, you'll be reintroduced to Spanish in common situations, beginning with describing classes, school friends, teachers, and school supplies. You'll discuss different styles of dressing, housing and neighborhoods, and learn about relationships between family members and friends, students and teachers, and employees and employer. You'll also describe daily personal routines and schedules, household chores and family responsibilities. Finally, you'll discuss different types of cuisine, dining establishments, and dining etiquette. You'll build on what you learned in Spanish 1B to communicate by listening, speaking, reading, and writing in Spanish as you internalize new vocabulary and grammar. You'll also learn about some regions of the Spanish-speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your Spanish studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

In Spanish 2B, you'll be reintroduced to Spanish in common situations, beginning with various professions and career plans for the future. You'll discuss traveling to different regions and the flora and fauna found in each region and describe different types of trips, including road trips, camping, and ecotourism. You'll also describe different hobbies, activities, and crafts that people enjoy. Finally, you'll discuss about different medical specialists, including dentists and veterinarians, and describe symptoms related to illness and injury. You'll build on what you learned in the Spanish 2A course to communicate by listening, speaking, reading, and writing in Spanish as you internalize new vocabulary and grammar. You'll also learn about some regions of the Spanish speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your Spanish studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

Course	CP Spanish 3	PCI Course #	710403
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 2 Spanish	Duration/Credits	1 yr. – 10 credits
Prerequisite	Spanish 2 or Equivalent	Credit Type	FL/VPA/CTE

Course Description: In Spanish 3A, you'll be reintroduced to Spanish in common situations, beginning with various daily routines, describing friends and family, childhood memories and activities, and childhood hopes and aspirations. You'll discuss and describe art, such as paintings and sculptures, and literature, such as novels and novellas, and give reactions and form opinions about art and literature. You'll also understand the process of selecting and applying to a university, aspirations at the university, and dealing with leaving home and moving into a dormitory. Further, you will describe university life and expectations from the university experience. You'll explore the dynamics and challenges of multiethnic and developing societies, environmental and social issues, causes and possible resolutions, and learning about unfamiliar countries using technology. Finally, you'll discuss current events reported in the media, different types of classified and other types of advertisement in the media (both print and online), the sections and supplements of a newspaper or magazine, and various jobs available in the media.

In Spanish 3B, you'll be reintroduced to Spanish in a variety of situations, beginning with multiculturalism, bilingualism, cultural influences on traditions, customs, food, and social experiences, and legends and folklore from different cultures. You'll discuss and describe genres of music, poetry, drama, and short stories, and proverbs from different cultures. You'll also explore how geographical features affect the weather, and how the geography and weather affect the clothing, food, and livelihoods of the local population. You'll also understand the history of Venezuela and how the Spanish conquerors and indigenous people shaped the culture of the country, and you'll learn about the South American independence movement, including some significant freedom fighters and their struggles to win independence. You will also discuss religions practiced in Argentina, the cultural icons of the country and how they compare to cultural icons from other countries, sports and activities in Argentina, some national symbols, such as the gauchos, and idioms and sayings from Argentina. Finally, you'll discuss types of wildlife and natural and agricultural resources found in Costa Rica, the human resources of the country that help overcome economic and natural disasters, and how to write formal and informal letters to share experiences.

Course	CP French 1	PCI Course #	710411
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 1 French	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: In French 1A, you'll be introduced to several common situations in which people communicate, such as exchanging names and greetings, describing people by physical and personality traits, and describing family members and aspects of your social life. You'll start with basic sentence structures and grammatical tools, and you'll learn to communicate by listening, speaking, reading, and writing in French as you internalize new vocabulary and grammar. You'll also learn about some regions of the French-speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your French studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

In French 1B, you'll be introduced to several common situations in which people describe how to earn, save, and manage money, modes of urban transportation, various seasons and the associated weather conditions, food, clothes, and activities. You'll also describe various art forms, plays, concerts, and movies. You'll discuss health and well-being and travel and tourism. You'll build on what you learned in the French 1B course to communicate by listening, speaking, reading, and writing in French as you internalize new vocabulary and grammar. You'll also learn about some regions of the French -speaking world where the

central characters of each unit are visiting. You will build on this semester's work as you advance in your French studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

Course	CP French 2	PCI Course #	710412
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 2 French	Duration/Credits	1 yr. – 10 credits
Prerequisite	French 1 or Equivalent	Credit Type	FL/VPA/CTE

Course Description: In French 2A, you'll be reintroduced to French in common situations, beginning with describing classes, school friends, teachers, and school supplies. You'll discuss different styles of dressing, housing and neighborhoods, and learn about relationships between family members and friends, students and teachers, and employees and employer. You'll also describe daily personal routines and schedules, household chores and family responsibilities. Finally, you'll discuss different types of cuisine, dining establishments, and dining etiquette. You'll build on what you learned in French 1B to communicate by listening, speaking, reading, and writing in French as you internalize new vocabulary and grammar. You'll also learn about some regions of the French -speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your French studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

In French 2B, you'll be reintroduced to French in common situations, beginning with various professions and career plans for the future. You'll discuss traveling to different regions and the flora and fauna found in each region and describe different types of trips, including road trips, camping, and ecotourism. You'll also describe different hobbies, activities, and crafts that people enjoy. Finally, you'll discuss about different medical specialists, including dentists and veterinarians, and describe symptoms related to illness and injury. You'll build on what you learned in the French 2A course to communicate by listening, speaking, reading, and writing in French as you internalize new vocabulary and grammar. You'll also learn about some regions of the French speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your French studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

Course	CP German 1	PCI Course #	710413
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 1 German	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: In German 1A, you'll be introduced to several common situations in which people communicate, such as exchanging names and greetings, describing people by physical and personality traits, and describing family members and aspects of your social life. You'll start with basic sentence structures and grammatical tools, and you'll learn to communicate by listening, speaking, reading, and writing in German as you internalize new vocabulary and grammar. You'll also learn about some regions of the German -speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your German studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

In German 1B, you'll be introduced to several common situations in which people describe how to earn, save, and manage money, modes of urban transportation, various seasons and the associated weather conditions, food, clothes, and activities. You'll also describe various art forms, plays, concerts, and movies. You'll discuss health and well-being and travel and tourism. You'll build on what you learned in the German 1B course to communicate by listening, speaking, reading, and writing in German as you internalize new vocabulary and grammar. You'll also learn about some regions of the German -speaking world

where the central characters of each unit are visiting. You will build on this semester's work as you advance in your German studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

Course	CP German 2	PCI Course #	716678
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 2 German	Duration/Credits	1 yr. – 10 credits
Prerequisite	German 1 or Equivalent	Credit Type	FL/VPA/CTE

Course Description: In German 2A, you'll be reintroduced to French in common situations, beginning with describing classes, school friends, teachers, and school supplies. You'll discuss different styles of dressing, housing, and neighborhoods, and learn about relationships between family members and friends, students and teachers, and employees and employer. You'll also describe daily personal routines and schedules, household chores and family responsibilities. Finally, you'll discuss different types of cuisine, dining establishments, and dining etiquette. You'll build on what you learned in German 1B to communicate by listening, speaking, reading, and writing in German as you internalize new vocabulary and grammar. You'll also learn about some regions of the German -speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your German studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

In German 2B, you'll be reintroduced to German in common situations, beginning with various professions and career plans for the future. You'll discuss traveling to different regions and the flora and fauna found in each region and describe different types of trips, including road trips, camping, and ecotourism. You'll also describe different hobbies, activities, and crafts that people enjoy. Finally, you'll discuss about different medical specialists, including dentists and veterinarians, and describe symptoms related to illness and injury. You'll build on what you learned in the German 2A course to communicate by listening, speaking, reading, and writing in French as you internalize new vocabulary and grammar. You'll also learn about some regions of the German speaking world where the central characters of each unit are visiting. You will build on this semester's work as you advance in your French studies: everything that you learn about a language and the cultures in which it is spoken will serve as a foundation for further learning.

Course	CP Amer. Sign Lang 1	PCI Course #	716653
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 1 Amer Sign Lang 1	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: ASL 1A is aligned with the *California State World Language Content Standards and the Foreign Language Framework for California Public Schools*, American Sign Language is the fourth most used language in the United States. ASL 1A is a course designed to give students tools to achieve an understanding of and an appreciation for the language used by many deaf people as well as others who are challenged physically in such a way that auditory speech is difficult if not impossible. Units explore different ASL aspects, including fingerspelling, basic signs, numbers and counting, unique spelling and numbering techniques, and syntax.

ASL 1B is aligned with the *California State World Language Content Standards and the Foreign Language Framework for California Public Schools*, American Sign Language is the fourth most used language in the United States. ASL 1B is a course that extends basic ASL aspects of communication while providing the foundation for further personal enrichment and

participation in local and global communities. The ability to communicate in a second language may encourage students to achieve higher levels of scholastic achievement and enable economic opportunities for a career in a field that might require a second language. ASL is recognized as its own language with its own syntax and presentation that may be taken beyond the classroom and applied to many areas of a student’s life, including the work world and personal activities. This course is meant to not only increase the language, reading, and content area skills of students but also to encourage students to develop and use their signing skills for communication within their own communities.

Course	CP Amer. Sign Lang 2	PCI Course #	716680
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	LOTE Level 2 Amer Sign Lang 2	Duration/Credits	1 yr. – 10 credits
Prerequisite	ASL 1 or Equivalent	Credit Type	FL/VPA/CTE

Course Description: In ASL 2A, through grade level appropriate coursework and expectations with rigor, depth, and breadth of content and assignments, students focus on concepts related to the study of American Sign Language. This is the first semester of a standards-based Year 2 course and students will review skills from Year 1, including the manual alphabet, fingerspelling, basic signs, ASL syntax, etc. so that they can continue to build on a strong foundation. As they move through the course, students will learn about Deaf culture and community, build their ASL vocabularies about a variety of topics, and work toward improving their signing and interpreting proficiency and fluency. The course provides multiple opportunities for students to not only interpret signed one-way and two-way conversations, but also to produce signed conversations of their own at an appropriate Year 2 level. Questions and activities are designed to engage higher order thinking processes and provide opportunities for practical applications of the concepts developed within the course.

In ASL 2B, students will focus on the continual practice and perfecting of foundational skills from Year 1 of ASL, understanding ASL syntax order, building new vocabulary, etc. The focus of the second semester of the course is fluency, as well as demonstrating proficiency in not only interpreting signed conversation, but also in producing signs appropriate to a Level 2 student. Providing rich media in multiple formats for ease of use and to address diverse student needs, this course reflects a bias-free and multiculturally sensitive environment. By the end of the full year course, students will be able to discuss themselves and the people around them; communicate about varied environments; utilize time increments in relation to activities, routines, etc.; understand and utilize correct ASL syntax, structure, cues, etc.; recognize the differences between formal ASL syntax and signing in more of an English word order syntax; indicate direction; know and use opposites; show and understand positive and negative emotions; ask questions, make statements, give instructions for specific actions, etc.; and demonstrate proficiency in fingerspelling, interpreting ASL, and producing signs.

Visual & Performing Arts (“f”)

Course	CP Art 1	PCI Course #	710617
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	Visual & Performing Arts (“f”)	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: This year long course is an introduction to art theory and application in the areas of drawing, conceptual design, painting and color theory. Assignments meet each of the five content strands of the California Visual Arts Standards. During the first semester, projects will focus on the elements of art and design (line, color, shape/form, texture, and space). During the second semester, projects and instruction will focus on the principles of art and design: balance, contrast, dominance, emphasis, movement, repetition, rhythm, subordination, variation, and unity. Students will develop a portfolio that will include both class work and independent projects. Research in art history will be an integral part of the course of study. Students will gain insight into the integration of art across subject areas and will explore career opportunities in the visual arts.

Course	CP Art 2	PCI Course #	710077
Grade Level	10 -12	Alternate #	
UC/CSU Approved?	Visual & Performing Arts (“f”)	Duration/Credits	1 yr. – 10 credits
Prerequisite	CP Art 1 or equivalent	Credit Type	FL/VPA/CTE

Course Description: This course will introduce students to the historic and cultural context of visual arts and explore and apply related media by chronological history and culture. History will include an understanding of each medium in an environmental and social context by examining various discoveries that made particular media available and desirable as tools. Students will be able to identify medium in examples of various periods and cultures as well as apply many of the media discovered to required assignments. Students will then have an expanded knowledge of choices that may apply to future work in Advanced Placement Art. Students will observe works from various significant historical eras focusing on; prehistoric works, Mesopotamia and Egypt, Greek and Roman Art, Romanesque & Gothic, Renaissance-Rococo, Neoclassicism & Romanticism (Realism/Impressionism), Expressionism & Abstract, and Pop Art. Students will experience the media and tools of each era while exploring the use of appropriate materials.

Course	CP Theater, Cinema, and Film	PCI Course #	716704
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	Visual & Performing Arts (“f”)	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: In Theater, Cinema, and Film A, students will understand that theater and cinema are both forms of art that tell a story. Students will explore the enchanting world of live theater and its fascinating relationship to the silver screen. They will also explore the different genres of both and how to develop the script for stage and film and then dive into how to bring the script to life with acting and directing. Students will learn how to describe the elements of theater, explain the global history of theater and stage plays, identify different historical purposes for plays, detail the most common structure for script

writing, summarize the steps in the acting process from auditioning to performing, and discuss elements of theater theory and criticism.

In Theater, Cinema, and Film B, students will explore multiple facets of the production process from both theater and film. Gain insights from industry leaders along the way and learn to think critically about different aspects to develop your unit-by-unit blog. You'll fully understand how high-quality entertainment and art are crafted for the theater and the silver screen. Knowing the big-picture elements in theater provides an important foundation for understanding theater as a whole. But to create a successful production, it is imperative to also learn the more granular concepts in theater. For example, there are many steps required to mount a stage production from the ground up. And it begins with the production process—those steps that, if executed properly, take a stage show from idea through development and production to the final applause.

Course	CP Music	PCI Course #	716634
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	Visual & Performing Arts ("F")	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: CP Music, general music, is a year-long basic music course that introduces students to the fundamentals of reading music (pitch and rhythm), surveys the history of Western music, looks at music of non-Western cultures, and examines the ways music expresses feelings and ideas and how it is used to tell stories. Along with completing the required key assignments, it is expected that students study voice or an instrument while enrolled in this and other VAPA courses. Students are also required to spend at least one hour per week participating in interactive in-person tutoring or instruction.

Course	CP Photography	PCI Course #	710317
Grade Level	9 -12	Alternate #	
UC/CSU Approved?	Visual & Performing Arts ("F")	Duration/Credits	1 yr. – 10 credits
Prerequisite	None	Credit Type	FL/VPA/CTE

Course Description: This one-year course is intended as a practical, hands-on guide to help you understand the skills required to achieve success in photography careers. Photography A will cover various topics in photography, such as history of photography, types of photography, types of cameras, camera support equipment, types of camera lenses, exposure, lighting setups, rules of composition, color photography, storing and manipulating images, copyright laws and fair use, and printing photos.

Photography B will cover various topics in photography, such as camera exposure settings, portrait photography, advertising photography, architectural photography, photographic special effects, retouching photographs, restoring old photographs, analog photography, darkroom equipment and development, safety procedures, evaluating photographs, stages of production, and photography portfolio.

College-Preparatory Elective (“g”)

Course	CP Economics	PCI Course #	711505
Grade Level	11 -12	Alternate #	
UC/CSU Approved?	College-Preparatory Elective (“g”)	Duration/Credits	1 semester – 5 credits
Prerequisite		Credit Type	ECONOMICS

Course Description: Students will explore fundamental economics, international economics, microeconomics and macroeconomic concepts. Students will use online resources, novels, current events, discussions, projects, and textbook materials to study topics such as, but not limited to, Economic Systems and Decision Making, Supply and Demand, Market Structures, Business Organizations, Economic performances and Economic Instability. Weekly discussions and assessments will be used to demonstrate students' understanding of these concepts. Students will complete a project called "The Life Project" over the course of this semester with one assignment per week. This is designed to assist them in considering their financial future. The project consists of various “real world” situations/decisions they will be faced with once entering the workforce. Students will create a budget that demonstrates what they feel is the best use of their income. Many of the activities require students to research information and some even require them to go into various institutions to obtain applications or information.

Course	Business Tech. (ICEV)	PCI Course #	716684
Grade Level	11 -12	Alternate #	
UC/CSU Approved?	College-Preparatory Elective (“g”)	Duration/Credits	1 semester–10 credits
Prerequisite	None	Credit Type	ELECTIVE

Course Description: With iCEV’s innovative, learning-on-demand platform, lessons feature industry experts and cover important topics such as business, computer technologies, finance, information technology and more. Those who earn the certification are more qualified and prepared to implement core technology and business skills in the workplace. Additionally, the certification allows employers to identify and connect with more skilled candidates, filling gaps in the labor market and jump-starting individuals’ careers. Students will learn office technology skills, Word processing applications, digital presentation applications, spreadsheet applications, database applications, desktop publishing applications, workplace communication strategies, and ethical applications in the workplace.

Course	Animal Science (ICEV)	PCI Course #	716693
Grade Level	11 -12	Alternate #	
UC/CSU Approved?	College-Preparatory Elective (“g”)	Duration/Credits	1 semester–10 credits
Prerequisite	None	Credit Type	ELECTIVE

Course Description: Animal Science Certification verifies individuals have acquired the foundational knowledge **and** skills to pursue a career within the animal science industry. Additionally, the certification allows employers to identify and connect with more skilled candidates, filling gaps in the labor market and jump-starting individuals’ careers. Students will learn general animal science, animal breeding, animal health and wellness, animal nutrition, and animal management practices (Beef Cattle, Sheep, Goat and Swine).

Course	Career Prep (ICEV)	PCI Course #	716694
Grade Level	11 -12	Alternate #	
UC/CSU Approved?	College-Preparatory Elective ("g")	Duration/Credits	1 semester–10 credits
Prerequisite	None	Credit Type	ELECTIVE

Course Description: Career Preparedness Certification verifies individuals possess the skills necessary to discover, pursue and successfully achieve career goals. This course validates candidates have a basic understanding of the workplace and their role in a professional environment. Additionally, the certification allows employers to connect with more skilled candidates, filling gaps in the labor market and jump-starting individuals' careers. Students will learn about career aptitude and assessments, education and training analysis, job application techniques, interview techniques, personal development, professional development, and workplace regulations and standards.

Course	Plant Science (ICEV)	PCI Course #	716691
Grade Level	11 -12	Alternate #	
UC/CSU Approved?	College-Preparatory Elective ("g")	Duration/Credits	1 semester–10 credits
Prerequisite	None	Credit Type	ELECTIVE

Course Description: Plant Science verifies individuals have acquired the knowledge and skills necessary to excel in a variety of plant, natural and environmental science related fields. The certification validates individuals are prepared to play a vital role in ensuring agricultural productivity. Additionally, the certification allows employers to identify and connect with more skilled candidates, filling gaps in the labor market and jump-starting individuals' careers. Students will learn plant anatomy, classification and nomenclature, plant processes, plant genetics, crop production, plant pests, fertilizers, pesticides and herbicides, and water resources.

Course	Floral Design (ICEV)	PCI Course #	716692
Grade Level	11 -12	Alternate #	
UC/CSU Approved?	College-Preparatory Elective ("g")	Duration/Credits	1 semester–10 credits
Prerequisite	None	Credit Type	ELECTIVE

Course Description: Floral Design verifies students have acquired the knowledge and skills to begin a career in the floral industry. **The certification** validates mastery of fundamental artistic elements and principles and their application, specifically in floral design. Students who earn the certification are more qualified and prepared to enter a variety of roles within the floral industry. Additionally, the certification allows employers to identify and connect with more skilled candidates, filling gaps in the labor market and jump-starting students' careers. Students will learn floral design history, flower identification, floral design basics, arrangement creation and duplication, and flower business management.