ARABIAN EDUCATION DEVELOPMENT

High School Course Catalogue Grade 09 – 12 AY 2025 – 2026

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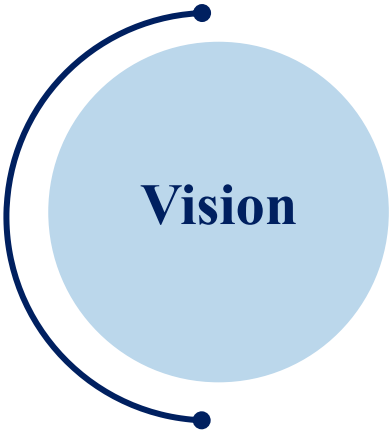
Al Ittihad Private Schools (IPS) Vision and Mission



UAE Centennial 2071 is based on four aspects: Education, economy, government development, and community cohesion. The goal is for the UAE to be the best country in the world by 2071. The vision's objectives also include the development of education, with a focus on advanced technology and engineering, and instilling an Emirati moral values system in future generations.

One of the four pillars of The UAE Centennial 2071 is Excellent education: Regarding education, UAE Centennial 2071 highlights the importance of excellent quality of education. Certain areas of focus in education include advanced science and technology, space science, engineering, innovation and health sciences. Other educational measures include teaching students, mechanisms for discovering their individual talents early. On the institutional level, educational institutions are encouraged to be incubators of entrepreneurship and innovation and to be international research centers.

Our Values


Respect
Innovation
Environmental Stewardship
Tolerance
Empathy
Global Citizenship
Resilience
Loyalty
Sustainability
Integrity

IPS High School Curriculum

The high school curriculum is founded on a set of carefully crafted objectives designed to provide a comprehensive and cohesive learning experience for all students. These objectives address the need for alignment with international and national standards, cultural relevance, and the development of critical skills required for success in both local and global contexts. By focusing on inclusivity, rigor, and consistency, the main objective is to create a curriculum that meets the diverse needs of students while adhering to the expectations of regulatory authorities and international benchmarks.

The following points outline the objectives in detail, showcasing how each contributes to the overarching goal of providing high-quality, inclusive, and culturally responsive education that prepares students for academic excellence and lifelong success:

- *Ensuring Standards Alignment Across All Grade Levels and Subjects*
  A key objective is to align curriculum content, teaching strategies, and assessments with the California CCSS for English and Math, NGSS for Science, the College Board AP requirements for advanced courses, and the UAE Ministry of Education standards for Arabic, Islamic Studies, Social Studies, and Moral Education. This alignment guarantees consistency in instructional quality and depth across the school system.
- *Unpacking Standards into Learning Objectives*
  International standards have been systematically unpacked into grade-specific learning objectives. These objectives include varying levels of depth of knowledge, such as recall, conceptual understanding, application, and extended thinking, ensuring a comprehensive approach to skill development and critical thinking.
- *Incorporating UAE National Identity*
  The curriculum embeds UAE national identity across all subjects through the integration of Arabic, Islamic Studies, Social Studies, and Moral Education, aligned with UAE Ministry of Education standards. Additionally, subjects such as English and Science include UAE-relevant content to contextualize global standards within the local culture.
- *Complying with Cultural Consideration Policies*
  Standards, objectives, or statements inconsistent with local cultural norms or the UAE's regulatory framework have been omitted or adapted. The curriculum aligns fully with the Cultural Consideration Policy to respect and reinforce the local context while maintaining the rigor of international benchmarks.
- *Improving Student Attainment and Progress*
  The curriculum emphasizes improving student attainment in standardized assessments such as MAP by embedding assessment-specific skills and competencies. This ensures that students develop strong foundational knowledge while preparing for rigorous global benchmarks.
- *Enhancing Performance in Standardized Assessments*
  The curriculum is designed to enhance student performance in MAP assessments by embedding critical thinking, data interpretation, and problem-solving skills across subjects.
- *Promoting Equity and Inclusion*
  The revamped curriculum ensures that all students, regardless of their individual needs, have access to quality education. This is achieved through differentiated instruction, enrichment activities for advanced learners, and remedial support for students needing additional help.

High School Phase of a US Curriculum School

The following terminology describes the grade level for the high school students:

Grade 09	Freshman
Grade 10	Sophomore
Grade 11	Junior
Grade 12	Senior

Graduation Requirements for High School Students

To earn a high school diploma, students must fulfill specific credit requirements across a range of academic subjects. These credits reflect the completion of courses that meet the required instructional hours and are essential for demonstrating a well-rounded education. The table below outlines the minimum credit requirements for each subject area, ensuring students are prepared for both academic and personal success.

Each credit represents *120 hours of classroom instruction*, and students must complete a minimum of *25 credits* to graduate. In addition to core subjects like English, Mathematics, Science, and Arabic Language, students are required to take courses in Visual/Performing Arts, Physical Education, and Electives, including Humanities. Certain courses, such as Moral Education, are mandatory but do not count toward the overall credit total.

All Arab students are required to take Arabic Language every semester, and all Muslim students are required to take Islamic Studies every semester as per the local regulatory authority regulations.

The breakdown of the required credits is as follows:

Subject	**Required Credits**
English	4
Science	4
Mathematics	4
Arabic Language	4
Islamic Studies	2
Social Studies	0 (Grade 09 Only)
Physical Education	2
Visual/Performing Arts	1
Electives	4 (Three of which are Humanities)
Moral Education	0 (Mandatory – No Credit)
Total	*25 Credits (Minimum)*
A credit requires 120 classroom hours of instruction	

Elements of a High School Grade Transcript

A high school transcript serves as an essential document that provides a comprehensive record of a student's academic achievements throughout their high school journey. This official report is frequently requested by colleges, universities, and employers to assess a student's academic performance and readiness for future opportunities.

- The transcript details the student's academic accomplishments by listing all courses completed during high school.
- It specifies when each course was taken, along with the corresponding grades received. Additionally, it includes the school's grading scale and an academic summary.
- Transcripts may also feature supplementary information, such as standardized test scores, honors or awards received, and other notable achievements. In some cases, course descriptions are attached to provide further context.
- Maintaining an updated transcript is mandatory for all high school students. The transcript must be regularly revised to reflect newly completed courses and updated academic records.

Minimum Grade Required to Earn Credit

In American high schools, the academic system is primarily credit-based rather than examination-based. Students earn credits by successfully completing courses which are required for graduation. The following guidelines outline the key policies regarding course credits and assessments:

- Students must achieve a minimum grade of *D- (60%)* in a course to be awarded credit. If a student does not meet this requirement, they will not receive credit for the course, and it must be retaken to fulfill graduation requirements.
- *Re-sit examinations are not offered* in U.S. high schools. Unlike some other education systems, U.S. high schools do not rely on final examinations as the primary basis for awarding credit. Instead, students earn credits through consistent course participation, performance, and completion of assignments throughout the academic term.

Grade Point Average (GPA)

The Grade Point Average (GPA) is an important academic metric used in American high schools to represent a student's overall academic performance. It provides a cumulative measure of the final grades earned across all completed courses over time.

- The GPA is calculated by *adding all final grades received in completed courses and then dividing the total by the number of credits awarded*.
- This numerical average reflects a student's academic progress and is often a key factor in determining eligibility for academic honors, college admissions, and scholarship opportunities.

Prerequisite & Course Requirements

A prerequisite refers to specific criteria that must be met before enrolling in a particular course. These requirements may include completing a prior course, demonstrating a certain skill level, achieving a minimum grade, gaining relevant experience, or obtaining instructor approval.

Prerequisites are indicated within the course descriptions and should be carefully considered when selecting courses. Additionally, some courses may require students to purchase specific materials necessary to achieve the course objectives and successfully complete the coursework.

Course Selection Process

Each spring, students participate in the course selection process for the upcoming academic year. School counselors guide students through this process by meeting with each grade level to explain graduation requirements, the course selection procedure, and strategies for making informed choices.

Before selecting courses, students must complete a *4-Year Academic Plan* (Appendix 1), which outlines the courses they have successfully completed and maps out their intended course of study for the remaining high school years. This plan ensures students take a structured approach to meeting graduation requirements and achieving their academic goals by considering prerequisites and long-term aspirations.

Parents are highly encouraged to collaborate with their children when completing the 4-Year Plan, providing valuable support and guidance.

Please note that enrollment in elective courses is *subject to space availability*. Priority is given to *Grade 12 students first*, followed by *Grade 11 students*, and so on, to ensure upperclassmen have access to the courses they need for graduation.

Advanced Placement (AP) Courses

Al Ittihad Private Schools offer the Advanced Placement (AP) Program by the College Board in the United States. These courses are designed to provide students with a rigorous academic experience equivalent to first-year college courses. AP courses provide a rigorous academic experience equivalent to first-year college courses and are intended for students with proven academic ability, interest, and motivation to manage the additional workload and study requirements. Below are the key details and policies regarding AP courses:

- AP courses are designed for students who demonstrate the ability to handle advanced-level coursework. These courses require significant self-directed study, organizational skills, and time management.
- The decision to enroll in an AP course should not be taken lightly. It is strongly recommended that students seek advice from parents, the course teacher, current students enrolled in the AP course of interest, and their counselor before making a final decision.
- Students enrolled in AP courses are offered the opportunity to complete the corresponding College Board external exam in May. The exams are graded on a scale of 1 to 5, and many colleges and universities offer credit, course exemptions, or advanced standing for scores of 3, 4 or 5, depending on their policies. Students are encouraged to research individual colleges to understand their specific AP credit policies.
- There is a fee for each AP exam, which is to be included in the school fees.
- AP courses are weighted to reflect their difficulty level. When calculating the Grade Point Average (GPA), AP courses carry a weight of 1.25 credits.
- Students who wish to take an AP exam in a subject not offered at IPS High School may prepare for the exam independently and register for the test through the school.
- If a student wishes to register for an AP course without receiving a teacher's recommendation due to their current academic performance, parents will be required to sign a consent form acknowledging that the course may not be suitable for the student. If the waiver form is not signed, the student will not be permitted to enroll in the requested AP course.

Add/Drop Procedures

The school's master schedule is developed each spring based on student course selections and interests. Therefore, once course selections are finalized, changes are generally *discouraged* to maintain the integrity of the schedule. However, in *exceptional cases*, schedule adjustments may be made during the designated add/drop periods.

During the *first semester*, students may request schedule changes within the *first two weeks*, primarily for reasons such as *level misplacement*. All change requests must begin with the *school counselor*, and students are required to attend their originally assigned classes until the change is approved and a new schedule is issued. If, during the *first two weeks (10 school days)* of a course, it is determined that a student has been misplaced or other extenuating circumstances arise, the teacher may initiate a course change request. This request requires consultation between the *student, parents, teacher, and counselor* before a schedule change can be made. Students must ensure they complete any missed assignments from their new course.

After the formal *drop period* has ended but before the conclusion of the *fourth week of the semester*, a student may request to drop a course. This request must be approved by the *principal, counselor, teacher, and parent* to be processed.

Course Description Per Department

At IPS Schools, the academic program is designed to equip students with the knowledge, skills, and critical thinking necessary for success in both academic and real-world settings. Each department's curriculum aligns with international academic standards, fostering a learning environment that emphasizes rigor, inquiry, and personal growth. Through a well-rounded approach to education, students engage with core subjects and electives that encourage intellectual curiosity, cultural awareness, and practical application of their learning.

The course descriptions below outline the specific subjects offered in each department. These descriptions provide detailed information on the content, skills, and learning objectives for each course, ensuring students are well-prepared for academic advancement, career readiness, and lifelong learning.

Mathematics

The Mathematics courses aim at building students' conceptual understanding, problem-solving abilities, and mathematical fluency across a wide range of topics. Aligned with the California Common Core State Standards, the curriculum offers students opportunities to explore advanced mathematical concepts, apply logical reasoning, and develop critical thinking skills necessary for both academic success and real-world applications.

A key focus of the department is to enhance students' academic mathematical proficiency by encouraging them to approach problems from multiple perspectives and apply their knowledge to practical scenarios. Courses are structured to progressively increase complexity from foundational skills to advanced mathematical analysis, ensuring students are prepared for higher education and careers in STEM fields. The Mathematics Department aims to equip students with the skills necessary to navigate complex mathematical challenges independently while promoting a growth mindset and lifelong learning in mathematics.

Grade 12 students can enroll in AP Calculus, a college-level course covering limits, derivatives, integrals, and the Fundamental Theorem of Calculus. The course emphasizes multi-representational problem-solving and the application of calculus concepts in real-world contexts such as physics, engineering, and economics. Students develop critical thinking and problem-solving skills while preparing for the AP Calculus Exam, which may provide college credit and a strong foundation for STEM-related fields.

The following table outlines the Mathematics courses offered at each grade level, along with the corresponding credits earned for successful completion:

Course: Mathematics		
Course	**Grade**	**Credit**
Integrated Math (Algebra 2/Geometry) (IMTH03)	09	1.0
Integrated Math (Algebra 2/Geometry) (IMTH02)	10	1.0
Precalculus (MTH1304)	11	1.0
Calculus/ AP Calculus (MTH1305/MTH1308)	12	1.0/1.25

Course Description – Integrated Math (Algebra 2/Geometry) – Grade 09

Couse Code:	IMTH03	**Prerequisite:**	ALG101
Number of Periods:	6		

This Grade 09 Mathematics course is designed to align with the California Common Core State Standards and covers a wide range of topics essential for developing advanced mathematical skills and understanding. The course begins with Advanced Function Analysis and Quadratic Techniques, where students explore the complexities of quadratic equations and their applications. It then progresses to Polynomial Operations and Functions, focusing on the manipulation and function properties of polynomials. Students will delve into Radical Functions and Inverses, gaining insights into how radicals and their inverses function within mathematical expressions. The course also covers the Dynamics of Exponential and Logarithmic Functions, providing a deep dive into their behavior and impact on different mathematical contexts. The Rational Functions and Expressions unit focuses on analyzing and solving problems involving rational functions and variable expressions. Understanding Sequences and Series forms a crucial part of the curriculum, where students learn to identify patterns and sum series in numerical sequences. The Fundamentals and Applications of Trigonometry module enhances understanding of trigonometric principles and their practical applications. The course also includes comprehensive units on Probability Analysis and Decision Making as well as Statistical Methods and Probability Analysis, which equip students with the tools to perform advanced probability calculations and make informed decisions based on statistical data. This course is structured to not only provide rigorous academic challenges but also to foster problem-solving skills that students can apply in real-world contexts.

Course Description – Integrated Math (Algebra 2/Geometry) – Grade 10

Couse Code:	IMTH02	**Prerequisite:**	IMTH03
Number of Periods:	6		

The Grade 10 Mathematics course, aligned with the California Common Core State Standards, delves deeply into geometric concepts and their practical applications, ensuring a robust understanding of space and shape. The course begins with the Fundamentals of Geometric Reasoning and Proof, setting a solid foundation for logical thinking and problem-solving. Students will explore Properties and Proofs of Parallel and Perpendicular Lines, enhancing their ability to reason and prove geometric theories. In the unit on Transformations and Symmetry in the Coordinate Plane, learners will manipulate and analyze figures to understand symmetry and transformational geometry. The Principles of Triangle Congruence and Rigid Motions module emphasizes the conditions under which triangles are congruent and explores the concept of rigid transformations. Students will examine Triangle Properties and Theorems, including bisectors, medians, altitudes, and the relationships and inequalities that emerge. The course also covers Quadrilaterals and the Principles of Triangle Similarity, providing insights into the properties and testing criteria for similarity among triangles and other polygons. Trigonometric Methods and Applications in Geometry introduce trigonometric ratios and their use in solving problems involving angles and distances. The Circles unit focuses on the properties of circles, including angles and arcs, providing students with the skills to solve complex problems involving circular shapes. The Geometry of Solids segment addresses three-dimensional figures, teaching students how to calculate surface area and volume effectively. Finally, Exploring Probability: Events and Their Relationships offers an introduction to probability theory, enabling students to understand and calculate the likelihood of various events. This course is designed not just to teach geometry, but to cultivate a rigorous mathematical mindset, preparing students for advanced studies in mathematics and related fields.

Course Description – Precalculus – Grade 11

Couse Code:	MTH1304	**Prerequisite:**	IMTH02
Number of Periods:	6		

The Precalculus course prepares students for college-level mathematics by offering a comprehensive exploration of key mathematical concepts and methods. Students will learn to analyze and model various types of functions including polynomial, rational, exponential, logarithmic, and trigonometric. They will explore complex number systems, perform operations with matrices, and solve systems of equations. The course emphasizes the development of problem-solving skills through the construction and interpretation of mathematical models, helping students to understand change and approximation using derivatives and integrals. Students will engage with functions in-depth, examining their properties, transformations, and applications. They will analyze the behavior of functions and their graphs, learn to solve inequalities, and apply their knowledge to real-world scenarios. The course also covers the analytical geometry of lines, circles, and conic sections, providing a solid foundation in spatial reasoning and geometric visualization. A significant component of the course is the use of technology and mathematical tools to simulate and solve problems, ensuring students are prepared not only for further academic pursuits in STEM fields but also for practical applications in industries that rely on quantitative analysis. The integration of theoretical knowledge with practical applications ensures that students develop a robust understanding of advanced mathematics, preparing them for challenges in higher education and beyond.

Course Description – Calculus/AP Calculus – Grade 12

Couse Code:	MTH1305/MTH1308	**Prerequisite:**	MTH1304
Number of Periods:	6		

The Calculus/AP Calculus course is designed to develop students' understanding of the concepts of calculus and provide experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. The connections among these representations are also important. Students will learn how to use limits to analyze the behavior of functions and understand continuity. Key topics include differentiation and integration of functions, including applications to real-world problems involving rates of change, motion, and optimization. Students will explore the Fundamental Theorem of Calculus, which links the concept of differentiating a function with the integral of a function. They will use derivatives to analyze functions and solve problems involving rates of change, motion, and application in the sciences. In integration, students will calculate areas under curves and volumes of solids of revolution, among other applications. The course also covers differential equations, slope fields, and specific techniques to solve first-order linear differential equations. Throughout the course, students are encouraged to use technology to help solve problems, experiment, interpret results, and support conclusions. Assessment of student understanding of calculus concepts will involve both graphical and analytical representations, ensuring students are well-prepared for the AP exam and further studies in mathematics, engineering, and the sciences.

English Language

The English courses aim at cultivating students' academic English proficiency through a structured, comprehensive curriculum aligned with the California Common Core State Standards. Across Grades 09 to 12, the department focuses on developing critical reading, writing, speaking, and analytical skills that are essential for both academic success and lifelong learning.

Students engage with a diverse range of literary and nonfiction texts to enhance their textual analysis, interpretative abilities, and critical thinking skills. Emphasis is placed on understanding complex themes, analyzing character development, evaluating narrative structures, and exploring cultural perspectives within literature. In each grade, students build on their knowledge and skills, progressively working towards more sophisticated reading comprehension and effective written expression.

The courses prioritize the development of academic language through close reading strategies, rhetorical analysis, and evidence-based writing. By refining these skills, students gain the tools to confidently express their ideas, engage with complex texts, and participate in meaningful literary discussions. The curriculum also aims to prepare students for college-level literacy demands, focusing on independent analysis, critical evaluation, and articulate communication across a variety of contexts. Each grade-level course has been carefully designed to ensure that students are able to master essential standards and progressively advance their proficiency in academic English, making them well-prepared for future academic and professional endeavors.

The following table outlines the English Language courses offered at each grade level, along with the corresponding credits earned for successful completion:

Course: English Language		
Course	**Grade**	**Credit**
English (ENG901)	09	1.0
English (ENG1001)	10	1.0
English (ENG1101)	11	1.0
English (ENG1201)	12	1.0

Course Description – English Language – Grade 09

Couse Code: ENG901 **Prerequisite:** ENG801
Number of Periods: 4

The Grade 09 English curriculum is designed to advance students' analytical skills and comprehension of complex texts as per the California Common Core State Standards. Throughout the course, students will cite substantial textual evidence to support detailed analysis and inferences, determine and analyze the development of central themes using specific textual details, and delve into the complexities of character development and its effect on the plot and themes. They will also examine the nuances of language, including figurative and connotative meanings and the impact of specific word choices on the text's tone and atmosphere. Analytical skills will be further honed through evaluations of how an author's structural choices, such as the order of events and time manipulation, affect the narrative. The course includes a comparative analysis of different media representations of texts and a critical look at how authors from non-U.S. cultures present points of view and cultural experiences. This curriculum aims to foster a deeper understanding of literature and its various contexts, enhancing students' ability to engage with and reflect on diverse textual materials effectively.

Course Description – English Language – Grade 10

Couse Code:	ENG1001	**Prerequisite:**	ENG901
Number of Periods:	5		

The Grade 10 English curriculum, aligned with the California Common Core State Standards, intensively focuses on developing advanced literacy skills. Students will cite comprehensive textual evidence to support detailed analyses and inferences, and deeply explore themes and central ideas in texts, observing how they develop and are influenced by specific details. The curriculum emphasizes understanding complex character development and the dynamics of character interactions within the narrative structure. Students will evaluate the connotations of language and the impact of an author's word choices on the tone and atmosphere of the text. Additionally, the course will analyze structural choices by authors, such as the ordering of events and manipulation of time, to study their effects on the narrative. Students will also engage with literature from diverse cultural perspectives and analyze how authors transform traditional narratives to create new stories. The aim is to enhance students' ability to comprehend and analyze literary and nonfiction texts within the 9–10 grade complexity band independently by the end of the year, preparing them for more sophisticated interpretative and expressive tasks.

Course Description – English Language – Grade 11

Couse Code:	ENG1101	**Prerequisite:**	ENG1001
Number of Periods:	5		

The Grade 11 English curriculum, aligned with California Common Core State Standards, focuses on enhancing students' critical reading and writing skills through rigorous analysis of texts. Students will be expected to provide strong, thorough textual evidence to support both explicit statements and inferences, including areas where texts leave uncertainties. They will identify and analyze the development of multiple themes, considering how they interact and build upon one another to form a complex narrative. The course will cover detailed examinations of an author’s narrative choices on story development, the impact of word choices on meaning and tone, and the effects of structural decisions on the overall aesthetic and thematic outcomes of texts. Additionally, students will distinguish authorial points of view and purposes, particularly through the lens of rhetorical effectiveness. Comparative analysis of different media interpretations of texts, as well as a focus on eighteenth to early-twentieth century foundational American literature, will help students understand diverse perspectives and cultural contexts. By the end of the course, students are expected to proficiently comprehend and engage with literature and literary nonfiction within the 11-CCR text complexity band, preparing them for college-level reading and writing demands.

Course Description – English Language – Grade 12

Couse Code:	ENG1201	**Prerequisite:**	ENG1101
Number of Periods:	5		

The Grade 12 English curriculum is designed to refine students' analytical skills, preparing them for college-level reading and writing. It emphasizes critical analysis of texts through strong, thorough citation of textual evidence to support interpretations of explicit content and inferences, including areas of ambiguity. Students will explore complex themes and central ideas, examining how they evolve and interact throughout the texts to form intricate narratives. The course also delves into the authorial choices that influence story development and narrative structure, such as the ordering of events, character development, and the settings that shape the narrative arc. Students will evaluate the nuances of language—figurative, connotative, and technical meanings—and the impact of specific word choices on the text's tone and reader's experience. Furthermore, the curriculum involves analyzing different perspectives and cultural contexts, particularly through comparative studies of texts and their adaptations across various media. By the end of the year, students are expected to proficiently understand and

interpret literature and literary nonfiction within the 11-CCR text complexity band, using their insights to craft well-argued analyses and engaging narratives. This comprehensive approach aims not only to enhance students' literary analysis skills but also to foster an appreciation for the depth and breadth of literature.

Science

The Science courses aim at developing students' scientific literacy, critical thinking, and problem-solving skills through a curriculum that emphasizes inquiry-based learning and hands-on exploration. Aligned with the Next Generation Science Standards (NGSS), the department offers a progressive series of courses that build students' understanding of key scientific concepts across biology, chemistry, and physics, preparing them for further studies in STEM fields.

The Science curriculum is designed to enhance students' scientific skills, including the ability to analyze data, apply scientific principles, and make evidence-based decisions. Each course encourages students to explore real-world applications of science, fostering a deeper appreciation for how scientific knowledge impacts society, technology, and the environment. Through a combination of theoretical learning and practical experimentation, students gain the foundational skills required to thrive in a world driven by scientific advancements.

Students are taught to think critically, solve complex problems, and communicate their findings effectively, equipping them for future academic pursuits and careers in fields such as healthcare, engineering, and environmental science. Below are detailed descriptions of the science courses offered from Grades 09 to 11.

In Grade 11, students can complete AP Physics C: Mechanics, a college-level course that focuses on core principles of Physics, such as kinematics, dynamics, energy, momentum, rotation, and oscillations. The course emphasizes advanced problem-solving, application of physical laws, and modeling of complex systems, preparing students to sit for the AP Physics C: Mechanics Exam. This rigorous course not only strengthens students' understanding of physics but also equips them with essential skills for further studies in science, technology, engineering, and mathematics (STEM) fields. Students are encouraged to take the AP exam to earn potential college credit and demonstrate their proficiency in advanced physics concepts.

The following table outlines the Science courses offered at each grade level, along with the corresponding credits earned for successful completion:

Course: Science		
Course	**Grade**	**Credit**
Biology (BIO101)	09	1.0
Chemistry (CHEM201)	10	1.0
Physics (PHY301)	10	1.0
Physics I / AP Physics C: Mechanics (PHY311/PHY308)	10	1.0/1.25

Course Description – Biology – Grade 09

Couse Code: BIO101 **Prerequisite:** SC801
Number of Periods: 4

The Biology course is structured to align with NGSS standards and spans a comprehensive range of topics from the fundamentals of chemistry as they relate to life and health to complex biological systems and their ecological contexts. It begins with an introduction to basic chemical principles and their biological implications, exploring organic chemistry and the crucial role of biological molecules. The course delves into cell biology, highlighting biochemical processes and energy conversion within living organisms. It covers the principles of genetics and heredity, molecular genetics, and virology, providing a deep understanding of genetic mechanisms and their applications in real-world scenarios. Adaptations of plants and fungi are studied to understand evolutionary biology, while broader ecological topics such as ecosystem dynamics, biodiversity, and human impacts on the environment are critically analyzed. The course also examines physiological aspects of animals, including homeostasis, nutrition, digestive, circulatory, and respiratory systems, focusing on their functions, health

implications, and disorders. Additionally, it includes a detailed exploration of plant systems, emphasizing their structural and functional roles. This curriculum is designed to equip students with a robust understanding of biological sciences, emphasizing analytical skills, problem-solving, and the application of knowledge to environmental and health-related challenges.

Course Description – Chemistry – Grade 10

Couse Code:	CHEM201	**Prerequisite:**	SC801
Number of Periods:	4		

This Chemistry course aligns with the NGSS standards and provides an in-depth exploration of fundamental chemistry concepts. Students will study matter and energy, the classification and properties of elements, atoms, and the periodic table, and delve into the quantum world of electromagnetic radiation and atomic structure. The course covers chemical bonding, including ionic and covalent bonds, molecular structures, and the quantitative aspects of chemistry such as moles, molar mass, and chemical formulas. It further explores chemical reactions, stoichiometry, molecular geometry, gas laws, and the properties of solutions. Additional topics include chemical kinetics, equilibrium, the properties and reactions of acids and bases, and the principles of nuclear chemistry, focusing on radioactivity and its applications. This comprehensive curriculum is designed to enhance students' understanding of chemical principles, encourage scientific inquiry, and develop analytical skills in chemical problem solving.

Course Description – Physics – Grade 10

Couse Code:	PHY301	**Prerequisite:**	SC801
Number of Periods:	5		

This Physics course, aligned with the NGSS, provides a thorough exploration of fundamental and advanced topics crucial for understanding the physical world. The course begins with the Foundations of Physics, setting the stage for deeper discussions on the nature of matter and energy. Students delve into Kinematics and Dynamics to understand motion and the effects of forces, followed by the study of Fluid Mechanics. The curriculum progresses to explore Sound, and Thermal Energy focusing on how these principles govern the mechanics of everyday life and the universe at large. The course also includes a comprehensive section on Light & Mirrors, Refraction & Lenses, and Interference & Diffraction. This program is designed to build from basic concepts to complex theories, fostering analytical thinking, problem-solving skills, and a deep understanding of the laws that govern physical phenomena.

Course Description – Physics I / AP Physics C: Mechanics – Grade 11

Couse Code:	PHY311/PHY308	**Prerequisite:**	PHY301
Number of Periods:	5		

The Physics I / AP Physics C: Mechanics course is designed to rigorously develop students' understanding of core principles, theories, and processes in mechanics, as part of the physical sciences. This course emphasizes mastering the fundamental aspects of mechanics such as kinematics, dynamics, energy, momentum, rotation, and oscillations. It provides a detailed framework that outlines essential competencies, including problem-solving skills, application of physical laws, and modeling of complex systems. Students are expected to demonstrate proficiency in applying their knowledge in varied contexts and to think broadly about the physical world, making interdisciplinary connections. This approach not only prepares students for the AP exam but also equips them for further studies in science, engineering, and technology, fostering critical thinking and problem-solving abilities necessary for academic and real-world success.

Physical Education

The Physical Education courses aim at promoting health, fitness, and well-being through a structured program that focuses on developing movement skills, building physical strength, and encouraging lifelong fitness habits. The curriculum is designed to progressively enhance students' physical performance, starting with foundational skills in Grade 9 and advancing to the application of complex strategies and personal fitness planning in Grade 12. The program aims to foster a positive attitude toward physical activity as a vital part of maintaining both mental and physical health.

Throughout the Physical Education courses, students engage in a variety of individual and team sports, improving their agility, coordination, balance, reaction time, and speed. They are introduced to biomechanical principles such as leverage, force, inertia, and rotary motion, which they apply to refine their skills and optimize their performance. The department emphasizes the importance of self-assessment and peer feedback, encouraging students to evaluate their performance and make adjustments to their training plans.

Students are also taught to design personalized fitness plans that align with scientific principles and their individual fitness goals. They learn how to analyze fitness data, adjust their routines, and adapt strategies to meet health-related fitness benchmarks. The curriculum not only focuses on physical development but also incorporates emotional and cognitive growth, teaching students to manage stress, build resilience, and improve their overall well-being.

The Physical Education program helps students build a solid foundation for lifelong fitness, equipping them with the skills and knowledge needed to maintain active and healthy lifestyles beyond high school. Through a combination of creative activities and structured learning, the department aims to channel students' energy and enthusiasm into positive and productive fitness practices that will benefit them in all aspects of life.

The following table outlines the Physical Education courses offered at each grade level, along with the corresponding credits earned for successful completion:

Course: Physical Education		
Course	**Grade**	**Credit**
Physical Education (PE902)	09	1.0
Physical Education (PE1002)	10	1.0
Physical Education (PE1102)	11	1.0
Physical Education (PE1202)	12	1.0

Course Description – Physical Education – Grade 09

Couse Code: PE902 **Prerequisite:** PE801
Number of Periods: 2

In the Grade 09 Physical Education course, students refine a diverse range of movement skills and individual and dual activities, progressing from simple to complex patterns. The curriculum emphasizes the development and application of skills such as balance, reaction time, agility, coordination, and speed to enhance performance. Students will also explore advanced transition strategies and apply biomechanical principles—including leverage, force, inertia, and rotary motion, to achieve higher levels of performance, which they will evaluate critically. The course integrates physical, emotional, cognitive, and scientific factors to provide a holistic approach to improving performance. The course also involves identifying effective training and conditioning practices, creating adaptable training plans, and setting personal fitness goals based on health-related fitness assessments and the principles of exercise. Through creative activities and structured learning, the course aims

to channel the students' natural energy and enthusiasm into building a solid foundation for future physical education and lifelong fitness.

Course Description – Physical Education – Grade 10

Couse Code:	PE1002	**Prerequisite:**	PE902
Number of Periods:	2		

The Grade 10 Physical Education curriculum builds on previously acquired skills, focusing on advanced movement patterns and strategic performance in various physical activities. Students demonstrate proficiency in using biomechanical principles to enhance their performance and are expected to engage in the independent learning of movement skills. The course covers the design and implementation of personalized fitness plans, reflecting on the impact of physical activities on disease prevention and health care cost reduction. Students will also learn to identify and utilize individual strengths in team settings and maintain a safe, supportive environment for all participants. Through creative activities and structured learning, the course aims to channel the students' natural energy and enthusiasm into building a solid foundation for future physical education and lifelong fitness.

Course Description – Physical Education – Grade 11

Couse Code:	PHE1102	**Prerequisite:**	PHE1002
Number of Periods:	2		

The Grade 11 Physical Education program challenges students to enhance their proficiency in a wide range of activities, including individual and team sports, through the application of increasingly complex movement patterns. Students refine their skills in balance, reaction time, agility, coordination, and speed, and learn to apply biomechanical principles such as leverage, force, inertia, and rotary motion, for advanced performance. Students engage in both self-assessment and peer feedback to optimize their training and conditioning practices. They develop personalized practice/training plans based on their evaluations and adapt their strategies to enhance individual and team performance. Regular participation in various physical activity and challenging fitness routines helps them surpass standard health-related fitness benchmarks. Through creative activities and structured learning, the course aims to channel the students' natural energy and enthusiasm into building a solid foundation for future physical education and lifelong fitness.

Course Description – Physical Education – Grade 12

Couse Code:	PHE1202	**Prerequisite:**	PHE1102
Number of Periods:	2		

In Grade 12, Physical Education students culminate their high school sports education by mastering complex movement patterns and applying advanced strategies in individual and team activities. The curriculum focuses on achieving excellence in physical performance through structured exercise regimes and personal fitness goals. Students are encouraged to engage independently in physical activities that promote lifelong health. They analyze and adjust their fitness plans according to scientifically based assessments and changing personal needs. They develop personalized practice/training plans based on their evaluations and adapt their strategies to enhance individual and team performance. Regular participation in various physical activity and challenging fitness routines helps them surpass standard health-related fitness benchmarks. Through creative activities and structured learning, the course aims to channel the students' natural energy and enthusiasm into building a solid foundation for future physical education and lifelong fitness.

Elective Courses

The elective courses offered provide students with diverse learning opportunities across various disciplines, encouraging them to explore their personal interests while fulfilling graduation requirements. The electives span Arts & Media, Science, Social Sciences, Computer Science & Technology, Foreign Languages, Social Studies, and English, ensuring a well-rounded academic experience that equips students with the skills necessary for both academic success and personal development. Below are key points about the elective offerings and their connection to graduation requirements:

- *Graduation Requirement Alignment:* All students must complete one Art course in Grade 09 as part of their graduation requirements. In addition, students must complete three Humanities courses, which can be selected from the Social Sciences, Foreign Languages, or Social Studies electives listed in the table.
- *Course Selection Flexibility:* Electives provide students with flexibility to explore various fields such as Business Management, Forensic Science, Cybersecurity, and Creative Design & Innovation. The wide range of courses allows students to broaden their academic horizons, develop practical skills, and prepare for future academic and career pathways.
- *Enrichment Through Technology and Innovation:* Courses such as Artificial Intelligence, Networking, and Creative Design & Innovation reflect the school's commitment to equipping students with 21st-century skills in technology and innovation. These courses are designed to prepare students for emerging fields and global challenges in the modern world.
- *Advanced Placement (AP) Opportunities:* Students who demonstrate high academic performance and readiness may choose to take AP exams in elective subjects where applicable, including AP Physics C (Mechanics and Electricity & Magnetism), AP Chemistry, AP Biology, AP Microeconomics, AP Macroeconomics, and AP Computer Science Principles. AP exams offer students the opportunity to earn college credit and demonstrate their mastery of advanced topics.

Elective Course Options Overview

- *Arts & Media:* The Arts & Media electives aim to foster creativity and artistic expression. Students are required to take Visual Arts in Grade 9 as part of the graduation requirements. In higher grades, students can explore Design, Visual, & Media Arts, allowing them to develop their artistic and technical skills in creative media.
- *Sciences:* Science electives provide students with opportunities to delve deeper into specialized areas of science beyond core courses. Options include AP-level courses such as AP Physics C: Electricity & Magnetism, AP Chemistry, and AP Biology, which allow students to prepare for AP exams and earn potential college credit. Additional electives like Forensic Science, Environmental Science, Earth & Space, and Health & Nutrition encourage students to apply scientific concepts to real-world problems.
- *Social Sciences:* Social Sciences electives allow students to explore a range of fields that focus on human behavior, society, and global economics. Courses such as Business Management, Accounting, Marketing, Entrepreneurship, and Mass Communication equip students with essential skills for future careers. For students interested in economics, AP Microeconomics and AP Macroeconomics provide opportunities to take AP exams. Courses like Global Awareness and Organizational Behavior emphasize understanding diverse cultures and human dynamics.
- *Computer Science & Technology:* With a focus on developing 21st century skills, Computer Science & Technology electives prepare students for a world driven by technological advancements. Courses such as Artificial Intelligence, Networking, Cybersecurity, and Creative Design & Innovation offer practical skills in modern technology. AP Computer Science Principles (AP CSP) provides students with the opportunity to take the AP exam and gain college-level experience in computer science.
- *Foreign Language:* The French elective course, offered at French I level, enables students to develop proficiency in a second language. This course helps students strengthen their communication skills and cultural awareness, preparing them for global interactions.
- *Social Studies:* Social Studies electives offer students the chance to explore historical and cultural topics. Courses like World History and Human Geography provide insight into global civilizations, human

interactions, and geographic influences. These electives enhance students' critical thinking and analytical skills in understanding past and present societal structures.

- *English:* The Journalism elective offers students a platform to develop their writing, research, and communication skills through the study and practice of journalistic techniques. This course enhances students' ability to gather and present information effectively, fostering critical thinking and media literacy.

The following table outlines the Elective Courses offered at IPS Schools across various categories, including Arts & Media, Sciences, Social Sciences, Computer Science & Technology, Foreign Language, Social Studies, and English, along with the corresponding grade levels and credits required for successful completion:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Arts & Media	Art	09	1.0
	Visual Arts & Media	10, 11, or 12	1.0
Sciences	Physics II / AP Physics C: Electricity & Magnetism	11 or 12	1.0/1.25
	Advanced Chemistry / AP Chemistry	11 or 12	1.0/1.25
	Advanced Biology / AP Biology	11 or 12	1.0/1.25
	Food & Technology	11 or 12	1.0/1.25
	Forensic Science	11 or 12	1.0/1.25
	Environmental Science	11 or 12	1.0/1.25
	Earth & Space	11 or 12	1.0/1.25
	Health & Nutrition	11 or 12	1.0/1.25
Social Sciences	Business Management	10, 11, or 12	1.0
	Accounting	10, 11, or 12	1.0
	Financial Services	10, 11, or 12	1.0
	Marketing	10, 11, or 12	1.0
	Economics I / AP Microeconomics	11 or 12	1.0/1.25
	Economics II / AP Macroeconomics	11 or 12	1.0/1.25
	Entrepreneurship	10, 11, or 12	1.0
	Mass communication	10, 11, or 12	1.0
	Global Awareness	10, 11, or 12	1.0
	Organizational Behavior	10, 11, or 12	1.0
	Sociology	10, 11, or 12	1.0
Computer Science & Technology	Artificial Intelligence	10, 11, or 12	1.0
	AP Computer Science Principles	10, 11, or 12	1.0/1.25
	Networking	10, 11, or 12	1.0
	Cybersecurity	10, 11, or 12	1.0
	Creative Design & Innovation	10, 11, or 12	1.0
Foreign Language	French I	11 or 12	1.0
	French II	12	1.0
Social Studies	World History	10, 11, or 12	1.0
	Human Geography	10, 11, or 12	1.0
English	Journalism	10, 11, or 12	1.0

Category 1 – Arts & Media

The Arts & Media electives provide students with essential opportunities to develop creative expression, critical thinking, and visual literacy. Aligned with the California Arts Standards, these courses explore both traditional and digital media, encouraging students to engage with cultural and historical influences on art while fostering innovative problem-solving skills.

In Grade 09, students are required to complete Art to fulfill their graduation requirements. This course introduces students to artistic creation, focusing on experimentation, art curation, and the impact of art on personal and societal beliefs.

The Visual Arts & Media course builds on these skills by preparing students for real-world applications in media and design industries, emphasizing digital tools, career planning, and technical competencies. Together, these courses help students meet graduation requirements and prepare them for future academic and career pathways in Arts, Media, and Entertainment fields.

The following table highlights Arts & Media electives, including Art for Grade 09 and Design, Visual & Media Arts for Grades 10-12, each offering 1.0 credit upon completion:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Arts & Media	Art (ART1301)	09	1.0
	Visual Arts & Media (ART1321)	10, 11, or 12	1.0

Art

Couse Code: ART1301 **Prerequisite:** ART801
Number of Periods: 4

The Art course, aligned with the California Arts Standards for Visual Arts, offers students a comprehensive exploration of artistic creation within contemporary and historical contexts. This course encourages students to engage in multiple creative approaches, emphasizing experimentation and the development of unique artistic investigations related to aspects of present-day life. Students will learn to work without a predefined plan, using both traditional and nontraditional materials, while considering their environmental and health impacts and practicing safe handling techniques. Collaboratively, students will propose, and design art installations or spaces intended to alter perceptions and experiences of specific environments. The curriculum focuses on the critical analysis and curation of artworks, applying culturally relevant criteria to evaluate and revise their projects. Students will examine how art exhibitions influence personal and societal beliefs, hypothesizing art's power to shape human experiences and worldviews.

Visual Arts & Media

Couse Code:	ART1321	**Prerequisite:**	ART801
Number of Periods:	4		

The Visual Arts & Media course, aligned with California Career Technical Education Model Curriculum Standards – Arts, Media & Entertainment (Pathway A), equips students with a robust foundation in visual and digital media arts. This program focuses on reorganizing and integrating visual art elements across a spectrum of digital and design applications, enabling students to apply artistic skills and processes to address industry-relevant challenges in both traditional and electronic media. The curriculum delves into the historical and cultural influences on the development of professional arts and media products, encouraging students to critically analyze and evaluate the effectiveness of artistic outputs based on art elements, design principles, and professional standards. The course covers the elements of discourse, including purpose, speaker, audience, and form, equipping students to craft effective narrative, expository, persuasive, and descriptive communications. A significant component involves identifying essential industry competencies, exploring commercial applications, and developing personalized career plans. Students will also gain insights into the key technical and technological requirements crucial for success in the various segments of the Media and Design Arts pathway, preparing them for dynamic careers in this evolving field.

Category 2 – Sciences

The Sciences elective courses offer students advanced knowledge in specialized fields such as Physics, Chemistry, Biology, and Environmental Science, aligning with Next Generation Science Standards (NGSS) and AP curricula. These courses emphasize critical thinking, problem-solving, and scientific inquiry while preparing students for AP exams and future academic pursuits in STEM fields.

Students can deepen their understanding of key scientific concepts through courses like Physics II / AP Physics C: Electricity & Magnetism, which covers electric forces, circuits, and electromagnetism, and Advanced Chemistry / AP Chemistry, which focuses on chemical reactions, equilibrium, and thermodynamics. Advanced Biology / AP Biology explores genetics, cellular processes, and ecosystems. Additional electives like Forensic Science, Food & Technology, Earth & Space, and Health & Nutrition offer practical, real-world applications of science in fields such as crime investigation, food safety, and health management. These electives not only strengthen students' scientific literacy but also provide them with the tools to analyze and solve complex problems, preparing them for college-level studies and careers in science and technology.

The following table lists Science elective courses for Grades 11 and 12, including AP-level options, with each course offering 1.0 to 1.25 credits to enhance students' knowledge in specialized fields like Physics, Chemistry, Biology, and Environmental Science:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Sciences	Physics II / AP Physics C: Electricity & Magnetism (PHY303/PHY309)	12	1.0/1.25
	Advanced Chemistry / AP Chemistry (CHEM205/CHEM204)	11 or 12	1.0/1.25
	Advanced Biology / AP Biology (BIO105/BIO104)	11 or 12	1.0/1.25
	Food & Technology (SCI1313)	11 or 12	1.0/1.25
	Forensic Science (SCI1301)	11 or 12	1.0/1.25
	Environmental Science (SCI1318)	11 or 12	1.0/1.25
	Earth & Space (SCI1322)	11 or 12	1.0/1.25
	Health & Nutrition (SCI1319)	11 or 12	1.0/1.25

Physics II / AP Physics C: Electricity & Magnetism

Couse Code: PHY303/PHY309 **Prerequisite:** PHY311
Number of Periods: 5

The Physics II / AP Physics C: Electricity and Magnetism course is designed to deepen students' understanding of electricity and magnetism, emphasizing the principles and complex applications relevant to advanced studies in physics. This course covers the nature of electric charges, the laws governing electric forces and fields, and the methodologies for calculating the strengths and directions of electric fields. Students will explore the concepts of electric potential and energy, delve into capacitors and dielectrics, and understand energy storage and operational mechanisms. The curriculum includes detailed studies on electric current and circuits, emphasizing the analysis of simple and compound circuits through Kirchhoff's rules. Additionally, the course investigates magnetic fields generated by moving charges and current-carrying wires, the interaction between charged particles and magnetic fields, and the foundational principles of electromagnetism, such as Faraday's Law of electromagnetic induction and its applications like generators and transformers. The course also tackles AC circuits and electromagnetic oscillations, exploring the dynamic behavior of systems containing resistors, capacitors, and inductors to prepare students for the AP Exam and further academic pursuits in physical sciences, engineering, and technology.

Advanced Chemistry / AP Chemistry

Couse Code:	CHEM205/CHEM204	**Prerequisite:**	CHEM201
Number of Periods:	4		

The Advanced Chemistry / AP Chemistry course, aligned with The College Board AP Chemistry standards, delve deep into the understanding and application of chemical principles through a rigorous academic framework. These courses explore a broad range of topics essential for students pursuing advanced studies in chemistry, starting with the fundamentals of atomic structure and properties. Students will learn about moles, molar mass, mass spectra of elements, and delve into the elemental and compositional analysis of both pure substances and mixtures. Key topics include atomic structures, electron configurations, and photoelectron spectroscopy to understand periodic trends and valence theories essential for predicting chemical behavior. The courses also cover the nature of chemical bonds, the structure of ionic solids and metals, Lewis diagrams, resonance, formal charge, VSEPR theory, and hybridization. Students explore the properties of substances, understanding the forces that act within and between molecules, and gain insights into the states of matter including gases (using the Ideal Gas Law and Kinetic Molecular Theory), solutions, and the behaviors of mixtures. The course addresses solution chemistry, solubility, and the methods used to separate and analyze solutions. In the area of chemical reactions, students learn to construct and interpret various types of chemical equations, including net ionic equations, and understand physical and chemical changes through stoichiometry and titration. This also includes a detailed study of redox reactions, acid-base chemistry, and the factors influencing reaction rates. Kinetics is explored through reaction mechanisms, the collision model, and energy profiles. In thermochemistry, students calculate and interpret energy changes in chemical reactions, study calorimetry, and apply Hess's Law to determine enthalpy changes. The course deeply investigates chemical equilibrium, exploring how reactions reach equilibrium, the use of the equilibrium constant, and applying Le Châtelier's principle to predict changes in reaction conditions. It also covers the solubility of ionic compounds and the factors affecting solubility. Acid-base chemistry is a significant part of the curriculum, exploring the concepts of pH, pKa, buffer solutions, titrations, and the application of the Henderson-Hasselbalch equation for buffer calculations. Advanced topics include thermodynamics and electrochemistry, where students analyze entropy, Gibbs free energy, electrochemical cells, and the quantitative aspects of electrochemical reactions. Throughout the course, students engage in practical laboratory experiments, enhance their problem-solving skills, and apply mathematical techniques to understand and predict the behavior of chemical systems. This comprehensive curriculum not only prepares students for the AP Chemistry exam but also lays a strong foundation for future scientific endeavors in various fields such as medicine, engineering, and environmental science.

Advanced Biology / AP Biology

Couse Code:	BIO105/BIO104	**Prerequisite:**	BIO101
Number of Periods:	4		

The Biology II / AP Biology course, aligned with the College Board's AP Biology standards, dives deep into the intricacies of biological processes and structures that influence living organisms. This course covers a vast array of topics from the molecular to the ecosystem level. It begins with an exploration of water's properties, emphasizing its polarity and hydrogen bonding, which are crucial for its biological functions. Students learn about macromolecules essential for life, understanding the composition, bonding, and functional implications of their monomers. The course elaborates on the structure and function of various biological macromolecules and the impact of subunit variations on their properties. It addresses nucleic acids, highlighting structural distinctions between DNA and RNA. Students examine cell structures, including subcellular components and organelles, to understand how they contribute to cellular functions, and explore the impact of cell size on material exchange between cells and their environment. Key topics also include plasma membrane components, detailing their roles in maintaining cell environment and the Fluid Mosaic Model. The course explores membrane permeability, transport mechanisms, and the facilitation of diffusion, detailing how organisms maintain solute and water

balance and how molecules traverse the plasma membrane. Enzyme functionality, including how environmental factors affect enzyme activity, is discussed, along with cellular energy processes like photosynthesis and cellular respiration. Students will link genetic diversity with molecular variations to survival and reproduction under different environmental conditions. The course also covers cell communication mechanisms, the role of signal transduction pathways in cellular responses, and how cellular responses are integrated into bodily functions or behaviors. It extensively covers genetics, from Mendelian to non-Mendelian patterns, chromosomal inheritance, and mutations, emphasizing their roles in genetic diversity and evolution. The curriculum integrates the study of energy flow through ecosystems, population dynamics, community ecology, and biodiversity's ecological implications. It considers human impacts on ecosystems through disruptions such as invasive species and environmental changes. The course is designed to cultivate a comprehensive understanding of biological principles while fostering analytical skills to apply knowledge effectively in interpreting scientific data, solving complex biological problems, and exploring practical applications of biology.

Food & Technology

Couse Code:	SCI1313	**Prerequisite:**	BIO101
Number of Periods:	4		

The Food & Technology course, aligned with Nevada Career Technical Education Standards, provides students with a comprehensive understanding of the food products and processing industry. This course explores the significant changes and trends affecting industry and investigates the roles of various industry organizations, groups, and regulatory agencies. Students learn to manage operational procedures, create equipment and facility maintenance plans, and implement Hazard Analysis and Critical Control Points (HACCP) to establish safe operating parameters. The course emphasizes stringent safety and sanitation procedures in handling, processing, and storing food products, ensuring worker safety with food product and processing equipment. By applying scientific principles to food processing, students work towards providing a safe, wholesome, and nutritious food supply. The curriculum also covers the selection and inspection techniques to obtain quality food products, evaluation and classification of processed food products, and the processes involved in preserving and presenting food for sale and distribution. Students also explore the employment fields within the food science technology industry, gaining insights into career opportunities and the importance of sales and display techniques in the market. This course prepares students for advanced studies and potential careers in food technology and related fields.

Forensic Science

Couse Code:	SCI1301	**Prerequisite:**	BIO101
Number of Periods:	4		

The Forensic Science course, aligned with New Jersey Career Technical Education standards, provides an in-depth exploration into the scientific methods and techniques used in crime scene investigation. This course covers the spectrum of forensic disciplines, teaching students how to define and distinguish among the varied branches of forensic science. Students will learn the systematic procedures for processing suspects and handling different types of evidence, including biological, chemical, and physical forms. Key topics include proper crime scene management, from documenting and photographing the scene to the precise collection of evidence such as hairs, fibers, and fingerprints. The course emphasizes the critical evaluation of evidence types, including the understanding of DNA functions, blood cell identification, and the implications of blood type analysis. Additionally, students will explore toxicology to solve crimes involving poisons, toxins, and venom. Practical skills taught include determining time of death through biological evidence such as hair analysis, entomology, and rigor mortis stages. Students will also delve into forensic anthropology, using bone characteristics to ascertain age, sex, and race of unidentified remains. The course aims to equip students with the ability to analyze handwriting, authenticate documents, and evaluate crime scenes using scientific and logical reasoning, ensuring

they grasp both the theoretical knowledge and practical applications of forensic science. Through this course, students will develop a comprehensive understanding of how forensic science applies to real-world legal systems and contributes to solving crimes.

Environmental Science

Couse Code:	SCI1318	**Prerequisite:**	BIO101
Number of Periods:	4		

The Environmental Science course, aligned with the Next Generation Science Standards (NGSS), offers a comprehensive study of ecosystems, Earth's systems, and human impacts on the environment. Students explore and use mathematical and computational representations to analyze the carrying capacity of ecosystems, biodiversity, and energy flows at various scales. They engage in constructing and revising explanations based on evidence for the cycling of matter and energy within ecosystems, including the roles of photosynthesis and cellular respiration. The course further delves into complex interactions within ecosystems that maintain balance under stable conditions and change under varying ones. Students also develop models to illustrate Earth's internal and surface processes and analyze geoscience data to understand feedback mechanisms affecting Earth's systems. They evaluate human impacts on natural resources and biodiversity, proposing and refining solutions to mitigate negative effects and enhance sustainability. This includes using computer simulations to model the interdependencies within natural systems and their alteration by human activities. Additionally, the course covers the Chesapeake Bay and Anacostia Watershed, focusing on specific regional issues related to water properties and ecosystem management. This curriculum not only covers theoretical aspects but also involves students in practical problem-solving activities aimed at designing, evaluating, and refining solutions to reduce the impacts of human activities on the environment. This approach fosters a deep understanding of environmental science and prepares students to contribute effectively to discussions and actions concerning contemporary environmental challenges.

Earth & Space

Couse Code:	SCI1322	**Prerequisite:**	PHY301
Number of Periods:	4		

The Earth & Space course, aligned with the Next Generation Science Standards (NGSS), offers a comprehensive study of ecosystems, Earth's systems, and human impacts on the environment. Students explore and use mathematical and computational representations to analyze the carrying capacity of ecosystems, biodiversity, and energy flows at various scales. They engage in constructing and revising explanations based on evidence for the cycling of matter and energy within ecosystems, including the roles of photosynthesis and cellular respiration. The course further delves into complex interactions within ecosystems that maintain balance under stable conditions and change under varying ones. Students also develop models to illustrate Earth's internal and surface processes and analyze geoscience data to understand feedback mechanisms affecting Earth's systems. They evaluate human impacts on natural resources and biodiversity, proposing and refining solutions to mitigate negative effects and enhance sustainability. This includes using computer simulations to model the interdependencies within natural systems and their alteration by human activities. Additionally, the course covers the Chesapeake Bay and Anacostia Watershed, focusing on specific regional issues related to water properties and ecosystem management. This curriculum not only covers theoretical aspects but also involves students in practical problem-solving activities aimed at designing, evaluating, and refining solutions to reduce the impacts of human activities on the environment. This approach fosters a deep understanding of environmental science and prepares students to contribute effectively to discussions and actions concerning contemporary environmental challenges.

Health & Nutrition

Couse Code:	SCI1319	**Prerequisite:**	BIO101
Number of Periods:	4		

The Health and Nutrition course, aligned with Health Education Content Standards for California Public Schools, provides an integrated approach to understanding the essentials of maintaining health through balanced nutrition, physical activity, and effective mental health management. Students will learn about the importance of dietary variety and moderation, the relationship between poor eating habits and chronic diseases, and proper food safety practices. The course emphasizes the significance of physical activity for maintaining a healthy weight and overall well-being, alongside the development of skills in emergency preparedness, including CPR and first aid. Additionally, it covers mental health issues, including the recognition of disordered eating and stress management techniques, and stresses the value of regular medical and dental checkups. Through a comprehensive curriculum, students will explore how to make informed choices about health care products and maintain good personal hygiene, all while considering cultural sensitivities to promote inclusive health practices.

Category 3 – Social Sciences

The Social Sciences electives offer students valuable insights into business, economics, global awareness, and communication, preparing them for real-world challenges and future academic pursuits. These courses cover topics such as Business Management, Accounting, Financial Services, and Marketing, equipping students with practical skills for managing finances, running businesses, and analyzing market trends.

Students can also explore Economics I and Economics II, gaining in-depth knowledge of economic principles and how they apply to government policies, market operations, and international trade. Courses like Entrepreneurship, Mass Communication, Sociology, and Global Awareness further develop students' critical thinking, problem-solving, and leadership skills, preparing them to be engaged global citizens. These electives emphasize practical applications, enabling students to develop financial literacy, communication proficiency, and organizational skills, which are essential for both higher education and career success.

The following table lists Social Sciences electives for Grades 10-12, covering courses like Business Management, Accounting, AP Economics, Entrepreneurship, and Global Awareness, each offering 1.0 to 1.25 credits:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Social Sciences	Business Management (SS1361)	10, 11, or 12	1.0
	Accounting (SS1312)	10, 11, or 12	1.0
	Financial Services (SS1357)	10, 11, or 12	1.0
	Marketing (SS1355)	10, 11, or 12	1.0
	Economics I (SS1344)	11 or 12	1.0
	Economics II (SS1345)	11 or 12	1.0
	Entrepreneurship (SS1323)	10, 11, or 12	1.0
	Mass Communication (SS1340)	10, 11, or 12	1.0
	Global Awareness (SS1327)	10, 11, or 12	1.0
	Organizational Behavior (SS1343)	10, 11, or 12	1.0
	Sociology (SS1341)	10, 11, or 12	1.0

Business Management

Couse Code: SS1361 **Prerequisite:** NA
Number of Periods: 4

The Business Management course, aligned with California Career Technical Education Model Curriculum Standards – Business & Finance (Pathway A), offers comprehensive training in the core aspects of managing and leading business operations. Students will learn about entrepreneurship and the essentials of launching a new business, including how to develop, plan, organize, secure, and manage resources to achieve specific business objectives. The curriculum delves into the management functions, organizational structures, and the distinctions between small and large companies. Economic theories relevant to business operations will be explored to help students apply these concepts in real-world scenarios. Additionally, students will gain skills in analyzing financial data to make informed short-term and long-term decisions. The course emphasizes the significance of risk management and compliance with regulations, preparing students to navigate complex business environments. Practical skills in using information and technology tools for efficient business management will be developed, alongside the ability to construct detailed marketing plans. Moreover, students will study advanced supply chain management principles, integrating these strategies into their business models to enhance operational efficiency and competitiveness in the market.

Accounting

Couse Code:	SS1312	**Prerequisite:**	NA
Number of Periods:	4		

The Accounting course, aligned with Utah Career and Technical Education standards, offers comprehensive training in fundamental accounting principles and practices tailored to both service and merchandising businesses. This course starts by defining generally accepted accounting principles (GAAP) and the structure of various business types. Students will learn the core components of the accounting equation and how to apply these elements in different accounting scenarios. The curriculum emphasizes the double-entry accounting system, teaching students to analyze transactions, journalize entries, post to the ledger, and prepare a trial balance. The students will also master the preparation of key financial statements such as the income statement and balance sheet. Essential accounting skills such as closing accounting periods, controlling cash, managing payroll, and handling sales and purchase transactions will be covered. The course provides detailed insights into adjusting entries and their impact on financial statements, alongside procedures for safeguarding business assets. Students will also learn about asset depreciation, specifically the straight-line method, and how to account for it in financial records. This course equips students with the knowledge to accurately track and report financial data, critical for any business environment.

Financial Services

Couse Code:	SS1357	**Prerequisite:**	NA
Number of Periods:	4		

The Financial Services course, aligned with California CTE Model Curriculum Standards – Business & Finance (Pathway C), offers a comprehensive exploration of financial management principles and practices. Students will develop skills in budget creation and use for financial decision-making, understand the impact of Generally Accepted Accounting Principles (GAAP) on transaction recording and financial statement preparation, and interpret financial formulas essential for the stability and growth of financial services. The course examines the effects of federal, state, and local regulations on financial decisions, applies economic concepts within financial services, and discusses the global dimensions of finance, including international finance and risk management. Additionally, students will evaluate a variety of investment vehicles and their roles in financial success, and assess financial service providers, exploring various career opportunities within the sector. This integrated approach prepares students for advanced education in finance or careers in the financial services industry, emphasizing both theoretical knowledge and practical application.

Marketing

Couse Code:	SS1355	**Prerequisite:**	NA
Number of Periods:	4		

The Marketing course, aligned with California Career Technical Education Model Curriculum Standards – Marketing, Sales, and Services (Pathway A), offers students a comprehensive education in marketing principles and their application within various sectors of the industry. This course integrates creative processes and systematic approaches to develop a deep understanding of marketing concepts and management strategies. Covering a broad spectrum of content including market research, economics, marketing budgets, and creative development, the course provides a robust foundation in public relations, advertising, branding, promotion, product and service management, pricing, and distribution. Students will gain practical skills in using technologies and communications within basic management functions. They will explore economic systems, cost-profit relationships, and international marketing concepts, as well as analyze the importance of legal, ethical, and financial considerations in marketing decisions. The course emphasizes the strategic use of tools and systems

to gather, evaluate, and disseminate information crucial for marketing decisions. Additionally, the curriculum covers the nature and scope of product/service management including quality assurance, product mix, and market positioning. Students will learn about the logistics involved in the movement, storage, and transfer of goods and services. They will also master promotional techniques through advertising, public relations, promotional sales, and e-commerce, utilizing these to achieve desired marketing outcomes. By understanding the process of pricing, students will learn to communicate the value or cost of goods and services effectively, employing strategies to achieve successful pricing outcomes. Specialized study paths such as sports marketing, hospitality marketing, advertising, or market research may also be explored, providing students with tailored skills that apply to specific industry sectors. This course prepares students to not only understand the theoretical aspects of marketing but also to apply these concepts in real-world settings effectively.

Economics I

Couse Code:	SS1344	**Prerequisite:**	NA
Number of Periods:	4		

The Economics I course, aligned with the AP Microeconomics Course from the College Board, offers a comprehensive introduction to the principles of economics that govern individual decision-makers and market dynamics. This course delves into the core economic concepts including scarcity, market operations, income distribution, and market failures, and examines the role of government in promoting efficiency and equity. Students are equipped to critically analyze economic issues using graphical, chart-based, and data-driven approaches. The course is designed to ensure students grasp fundamental economic principles, develop skills necessary for advanced economics studies, and understand the application of these principles across various contexts. The course is divided into six units: Basic Economic Concepts, Supply and Demand, Production, Cost and the Perfect Competition Model, Imperfect Competition, Factor Markets, and Market Failure and the Role of Government. Each unit builds on the Big Ideas of the course—Scarcity and Markets, Costs, Benefits, and Marginal Analysis, Production Choices and Behavior, and Market Inefficiency and Public Policy—allowing students to explore how limited resources and unlimited wants necessitate trade-offs, how firms optimize production to maximize profits, and how inefficiencies in private markets can be addressed through targeted public policies. This structured approach not only enhances conceptual understanding but also prepares students for practical and theoretical challenges in the economic landscape.

Economics II

Couse Code:	SS1345	**Prerequisite:**	SS1344
Number of Periods:	4		

The Economics II / AP Macroeconomics course, aligned with the AP Macroeconomics Course from the College Board, is a college-level course that delves into the comprehensive principles governing an economic system as a whole. This course emphasizes the study of national income and price-level determination and acquaints students with key economic performance measures, the financial sector, and the broader implications of stabilization policies, economic growth, and international economics. This course is meticulously structured to deepen students' understanding of core economic principles through the exploration of Big Ideas such as Economic Measurements, Markets, Macroeconomic Models, and Macroeconomic Policies. The course is divided into six focused units: Basic Economic Concepts; Economic Indicators and the Business Cycle; National Income and Price Determination; Financial Sector; Long-Run Consequences of Stabilization Policies; and Open Economy—International Trade and Finance. Each unit builds on the Big Ideas, enabling students to make meaningful connections among concepts and apply them in various contexts to develop a deeper conceptual understanding. Students will also engage with graphs, charts, and data to analyze, describe, and explain macroeconomic concepts effectively. This approach not only prepares students for advanced economics

coursework but also equips them with the analytical skills necessary to assess and influence policy, business, and personal decisions within a global economic framework.

Entrepreneurship

Couse Code:	SS1323	**Prerequisite:**	NA
Number of Periods:	4		

The Entrepreneurship course, aligned with California Career Technical Education Model Curriculum Standards – Marketing, Sales, and Services (Pathway B), offers students a comprehensive understanding of the entrepreneurial process within the free-enterprise system. This course explores the vital role entrepreneurs play in driving economic growth and innovation. Students will delve into the development of key entrepreneurial traits, the foundational aspects of entrepreneurship, and the application of creative and innovative thinking to product and service creation. Throughout the course, students will evaluate various leadership styles and management functions essential for running successful small businesses. They will gain insight into the strategic planning process, including elements crucial for initiating business ventures and sustaining growth. The curriculum covers essential skills in financial planning, report preparation, and financial forecasting, equipping students with the ability to manage business finances effectively. Additionally, the course emphasizes practical marketing skills tailored for small businesses, focusing on market research, brand development, public relations, advertising, and the strategic use of promotions to enhance product and service management. Students will also learn to harness technology to optimize entrepreneurial endeavors and understand the integral role of human resources in maintaining a thriving business environment. By the end of the course, students will be proficient in identifying strategies for business startups, managing business growth, and applying comprehensive marketing and management principles in real-world scenarios. This course not only prepares students for future entrepreneurial ventures but also instills a deep understanding of the broader impact of entrepreneurship on society and the economy.

Mass communication

Couse Code:	SS1340	**Prerequisite:**	NA
Number of Periods:	4		

The Mass Communication course, aligned with the High School Mass Media and Media Literacy Standards-Indiana Department of Education, equips students with a comprehensive understanding of mass media's role and impact in society. This course delves into the development, function, and influence of mass media globally, providing students with the tools to analyze and evaluate how media shapes cultural contexts and impacts individual and community perspectives. Through critical analysis of various media formats and stories, students learn to identify key elements such as themes, evidence, and main ideas, and understand the methods used to influence audiences. The course also emphasizes the importance of accurate reporting and fact-checking, enabling students to compare different versions of media stories across multiple platforms and time frames to discern bias and intent. Students will engage in creating media-related content, from narrative and persuasive compositions to in-depth research reports, that demonstrate a command of standard English and effective research and organizational strategies. Additionally, the course fosters media literacy by teaching students to evaluate the sources and accuracy of information, enhancing their role as informed citizens capable of critical thinking and effective communication in society.

Global Awareness

Couse Code:	SS1327	**Prerequisite:**	NA
Number of Periods:	4		

The Global Awareness course, aligned with UNESCO Education for Sustainable Development Goals, is designed to deepen students' understanding of the complexities of global challenges and the multifaceted nature of sustainability. The course explores the concepts of extreme and relative poverty, the distribution and impacts of wealth, and the various causes of poverty such as unequal resource distribution, colonization, and environmental challenges. Students will learn about sustainable agriculture, the importance of land rights, and strategies to combat hunger and malnutrition globally. This course also addresses health, including physical, mental, and social aspects, and examines the socio-political-economic factors that influence well-being. Students will critically assess the role of education in fostering sustainable development and promoting equal access to learning opportunities. The course delves into issues of gender equality, analyzing forms of discrimination and strategies for promoting gender parity. Students will explore the sustainable management of water and energy resources, discussing concepts like Integrated Water Resources Management and energy efficiency. The curriculum also covers sustainable economic growth, employment, infrastructure, industrialization, and the systemic approaches necessary for achieving sustainable cities and communities. Additionally, the course tackles the pivotal role of biodiversity, ecosystem services, and the conservation of marine and terrestrial habitats. It underscores the importance of global governance, international human rights frameworks, and the significance of global partnerships in achieving sustainable development goals. By the end of the course, students will not only have a thorough grounding in the environmental, economic, and social pillars of sustainability but will also be equipped with the knowledge and skills to actively participate in creating a more sustainable, equitable, and peaceful world.

Organizational Behavior

Couse Code:	SS1343	**Prerequisite:**	NA
Number of Periods:	4		

The Organizational Behavior course provides a comprehensive exploration into the dynamics of how people interact within organizations. Central to the ethos of the course is the recognition that people are the heart of a company and key to its success, where they must be supported by the right organizational structure and culture to truly thrive. This course delves into the multifaceted nature of organizational behavior, which is influenced by various factors from personal life to organizational directives. The course covers the roles of individuals and groups within businesses, the impact of leadership and power dynamics, effective conflict management, and the pivotal roles of organizational culture and diversity in managing change. By the end of this course, students will be able to understand and define organizational behavior at the individual, group, and organizational levels. They will learn how diversity and globalization influence workplace behavior, recognize the effects of environments and personal perceptions, and identify strategies for enhancing motivation and group dynamics to boost productivity and organizational effectiveness. Additionally, students will gain insights into different leadership styles, the mechanisms for managing conflict, and the implications of organizational structure and culture on behavior. This course aims to equip students with the skills to create and sustain dynamic and productive work environments, fostering a meaningful work culture through informed and strategic organizational behavior practices.

Sociology

Couse Code:	SS1341	**Prerequisite:**	NA
Number of Periods:	4		

The Sociology course, aligned with The American Sociological Association's (ASA) National Standards for High School Sociology, offers students a comprehensive understanding of sociology as a scientific field of inquiry. The course begins by distinguishing the sociological perspective from other social sciences, highlighting its unique focus on societal structures and dynamics. Students will critically evaluate various sociological research methods, appreciating their strengths and limitations, and apply a diverse array of sociological theories to understand complex social phenomena. Through a blend of theoretical knowledge and practical application, this course aims to equip students with analytical tools to assess and interpret social dynamics critically. It prepares students to become informed citizens capable of engaging thoughtfully with the complex social issues that shape our world.

Category 4 – Computer Science & Technology

Computer Science & Technology courses provide students with essential skills to succeed in digital innovation, cybersecurity, and networking. These courses, aligned with international standards, offer hands-on opportunities to explore artificial intelligence, secure systems, and creative design solutions. Students gain practical knowledge in developing applications, analyzing data, and safeguarding digital environments, preparing them for advanced studies and careers in technology.

The curriculum includes AP Computer Science Principles, emphasizing computational problem-solving and responsible computing. Other courses like Networking and Cybersecurity equip students with the tools to manage and secure information infrastructures, while Creative Design & Innovation nurtures technological creativity and problem-solving in real-world contexts.

The following table lists Computer Science & Technology electives for Grades 10-12, including Artificial Intelligence, AP Computer Science Principles, Networking, Cybersecurity, and Creative Design & Innovation, with each course offering 1.0 to 1.25 credits:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Computer Science & Technology	Artificial Intelligence (ICT1326)	10, 11, or 12	1.0
	Computer Science Principles / AP CSP (ICT1318/ICT1322)	10, 11, or 12	1.0/1.25
	Networking (ICT1352)	10, 11, or 12	1.0
	Cybersecurity (ICT1353)	10, 11, or 12	1.0
	Creative Design & Innovation (CS1305)	10, 11, or 12	1.0

Artificial Intelligence

Couse Code: ICT1326 **Prerequisite:** NA
Number of Periods: 4

The Artificial Intelligence course, aligned with the Computer Science Teacher Association (CSTA) standards and UNESCO AI Framework, explores the *Five Big Ideas in Artificial Intelligence* to provide students with a comprehensive understanding of AI principles. This course covers perception, where students learn how computers interpret sensory inputs; representation and reasoning, focusing on how AI constructs and utilizes data structures to solve problems; machine learning, emphasizing statistics in QT from large datasets; natural interaction, examining AI's ability to mimic human communication and behaviors; and the societal impact, critically discussing both positive and negative effects of AI technologies. Through hands-on projects and ethical debates, students will apply AI concepts, explore real-world applications, and consider the societal and ethical dimensions of AI, preparing them for advanced studies or careers in this rapidly evolving field.

Computer Science Principles (CSP) / AP CSP

Couse Code:	ICT1318/ICT1322	**Prerequisite:**	NA
Number of Periods:	4		

The elective course Computer Science Principles / AP Computer Science Principles is designed to introduce students to the foundational concepts of computer science while emphasizing problem-solving, understanding hardware, and creating algorithms that are vital in utilizing and innovating computer applications. This course integrates practical applications of computer science into various aspects of everyday life, highlighting the importance of maintaining privacy, safety, and security. This AP course is committed to broadening participation in computer science by engaging a diverse student body, including those traditionally underrepresented in this field, such as female students, students of color, students with disabilities, and students from rural areas. It encourages students to explore the transformative power of computer science through a curriculum that is both rewarding and challenging. Key components of the course include Computational Solution Design, where students design and evaluate computational solutions; Algorithms and Program Development, which involves developing and implementing algorithms; Abstraction in Program Development, focusing on creating programs that incorporate abstractions; Code Analysis, which includes evaluating and testing algorithms and programs; and Computing Innovations, where students investigate real-world computing innovations. The course also places a strong emphasis on Responsible Computing, aiming to foster an inclusive, safe, collaborative, and ethical computing culture. Students will have opportunities to collaborate to solve real-world problems, address issues of equity and access and gain a comprehensive introduction to the breadth of computer science. This approach not only makes discipline accessible but also engaging, preparing students for further education in computing fields and helping them understand the broader impacts of their work.

Creative Design & Innovation

Couse Code:	CS1305	**Prerequisite:**	NA
Number of Periods:	4		

The Creative Design & Innovation course is tailored to align with the Computer Science Teacher Association (CSTA) standards, offering a deep dive into the intersection of technology, creativity & problem-solving. This course equips students with an understanding of the core functions of operating systems, including memory management, data storage and retrieval, process management & access control. Students will learn to illustrate computing principles such as logic, input, and output using hardware components like logic gates and IO pins and explore network functionality issues through simulations to understand the impacts of bandwidth, load, delay, and topology. Security is a major component, with discussions on how software developers safeguard devices and data through encryption, authentication, & secure coding practices. The course heavily incorporates data analysis, using tools and techniques to discern patterns in complex systems such as social media interactions or consumer behaviors, and employs artificial intelligence to understand its influence on software & physical systems like digital advertising, autonomous vehicles, and fraud detection. Students will engage in hands-on projects to implement AI algorithms for simple games, develop and adapt classic and modern algorithms for efficiency, and compare data structures for various applications. The course promotes an understanding of software development using APIs, libraries, and diverse programming environments to create versatile applications suitable for web, mobile, or desktop platforms. It emphasizes the use of version control systems, integrated development environments & collaborative tools within group projects to foster professional software development experience. Moreover, students will tackle real-world problems by creating applications that interface with online databases and analyze large-scale computational issues to devise viable solutions. Through code reviews, they will evaluate and enhance the usability, efficiency & scalability of software products. The course also encourages critical discussions on the ethical, societal & legal aspects of software development, preparing students to thoughtfully consider the broader impacts of their technological creations on equity, access, and cultural evolution in areas such as education, healthcare, and entertainment.

Networking

Couse Code:	ICT1352	**Prerequisite:**	NA
Number of Periods:	4		

The Networking course, aligned with California Career Technical Education Model Curriculum Standards – Information and Communication technologies (Pathway B), is designed to prepare students for a future in network analysis, planning, and implementation. This comprehensive course focuses on the intricate details of network systems, including the design, installation, maintenance, and management crucial for the success of modern organizations. Students will gain a deep understanding of the principles of networking, alongside the technologies, models, and protocols used in various network settings. Throughout the course, students will engage in identifying, describing, and implementing network media and physical topologies. They will also learn to install, configure, and differentiate between common network devices, mastering skills essential for effective network administration and management. The curriculum emphasizes practical training in proper network management techniques, ensuring students can handle real-world networking scenarios efficiently. Additionally, the course covers effective communication and interpretation of information in industry-standard visual and written formats, the use of and assessment of network communication applications and infrastructure, and the analysis of organizational needs to identify precise networking requirements. Security forms a critical component of the curriculum, with detailed sessions on identifying security threats to networks and describing general methods to mitigate these risks. By the end of the course, students will be equipped with the necessary skills to contribute to the establishment, maintenance, and security of information and communication technologies infrastructure, making them valuable assets in a continuously growing field of employment.

Cybersecurity

Couse Code:	ICT1353	**Prerequisite:**	NA
Number of Periods:	4		

The Cybersecurity course, aligned with National Cryptologic Foundation High School Curriculum, is designed to provide a comprehensive understanding of cybersecurity within the context of modern societal values and technological landscapes. This course explores the foundational roles that operating system software plays, such as memory management and access control, and delves into the principles of cybersecurity through practical and theoretical lenses. Students will learn how to analyze and manage the security aspects of various systems, emphasizing the importance of ethical reflection and judgment in evaluating potential harm, benefits, and trade-offs involved in cybersecurity decisions. Central to the curriculum is an understanding of how cybersecurity relies on confidentiality, integrity, and availability (CIA triad), with a focus on creating systems that are not only effective but also resilient against unauthorized access and breaches. The course covers the design & implementation of secure systems, highlighting the need for simplicity to facilitate security checks and the importance of restricting access based on comprehensive policies to enhance system security. Students will engage with real-world scenarios to understand network functionality issues like bandwidth and delay and use online simulators to explore these concepts further. They will also compare various cybersecurity practices, understand the complexities of legal, ethical & financial considerations, and use cryptography to protect data. Practical applications include developing strategies to defend against software vulnerabilities and understanding the global and ever-evolving nature of cybersecurity threats. Through this course, students will not only acquire the skills necessary to secure digital environments but also develop a keen awareness of how cybersecurity shapes and is shaped by significant historical, economic, and societal forces. The curriculum is designed to foster critical thinking and problem-solving skills essential for navigating and securing today's complex digital landscapes.

Category 5 – Foreign Languages

The Foreign Languages elective offers students an opportunity to learn a second language and explore global cultures. The French I course focuses on developing communication skills in listening, speaking, reading, and writing, with an emphasis on practical, real-world applications. The course encourages cultural exploration and helps students build a solid foundation in language acquisition while promoting global awareness and cross-cultural understanding.

The following table lists French I as a Foreign Language elective available for Grades 11 or 12, offering 1.0 credit upon successful completion:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Foreign Language	French I (WL1303)	11 or 12	1.0
	French II (WL 1304)	12	1.0

French I

Couse Code: WL1303 **Prerequisite:** NA
Number of Periods: 4

The French I course, aligned with the American Council on the Teaching of Foreign Languages (ACTFL), introduces students to the fundamental elements of the French language and Francophone culture. The course focuses on developing basic communication skills in listening, speaking, reading, and writing, with an emphasis on real-world applications in everyday contexts. Through thematic units, students build foundational vocabulary, practice simple sentence structures, and develop the ability to understand and express basic ideas in French. The course integrates cultural exploration to encourage students to appreciate diverse perspectives and cultural practices within the Francophone world.

Key units in French I include personal identity, colors and nature, education and work, housing and transportation, food and dining, leisure activities, and urban and rural life. Students engage in interactive activities such as role-playing, simulated conversations, and multimedia projects to reinforce their learning. The course places a strong emphasis on cultural competency, teaching students to compare cultural norms between French-speaking countries and their own, fostering global awareness and cross-cultural understanding. By the end of the course, students will be able to introduce themselves, describe their personal identity, discuss human traits, colors, and nature, communicate about education, work, housing, and transportation, navigate daily routines such as shopping and dining experiences, and discuss leisure activities and preferences in social situations. The French I course lays the foundation for progressive language acquisition and prepares students for more complex communication in French II, helping them build confidence in both oral and written communication.

French II

Couse Code:	WL1304	**Prerequisite:**	WL1303
Number of Periods:	4		

The French II course builds upon the foundational skills developed in French I, focusing on enhancing communication proficiency and broadening students' cultural understanding of the Francophone world. The course, aligned with the ACTFL standards, encourages students to engage in more advanced conversations and comprehend increasingly detailed texts in French. Students expand their vocabulary and learn more complex sentence structures to cover a wider range of real-world topics, including health and well-being, travel and transportation, communication and administration, daily life routines, cultural traditions and holidays, and the environment and sustainability.

Throughout the course, students participate in hands-on projects, role-playing scenarios, and collaborative activities to improve their fluency and comprehension. They are encouraged to practice longer conversations, respond to detailed questions, and write structured paragraphs and short essays. The curriculum also places special emphasis on reading comprehension, enabling students to understand and analyze intermediate-level texts. In addition, students explore cultural traditions across various French-speaking countries, promoting a deeper appreciation of global diversity. By the end of French II, students will be able to communicate about health and well-being, discuss travel plans and transportation options, describe daily routines and administrative tasks, compare urban and rural life in greater detail, and engage in conversations about environmental issues and sustainability.

Category 6 – Social Studies

The Social Studies electives provide students with the opportunity to explore historical events and human interactions with the environment to develop a deeper understanding of global issues and multicultural perspectives. The World History course offers a comprehensive overview of modern historical events, analyzing their impact on societies and global relations, while Human Geography introduces students to the spatial study of human interactions and the socioeconomic impact on Earth's surface.

Both courses enhance students' critical thinking skills and global awareness, preparing them to engage with contemporary issues and view history and geography as essential tools for problem-solving and responsible citizenship.

The following table lists Social Studies electives, including World History and Human Geography, available for Grades 10-12, with each course offering 1.0 credit upon completion:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
Social Studies	World History (SS1342)	10, 11, or 12	1.0
	Human Geography (SS1339)	10, 11, or 12	1.0

World History

Couse Code: SS1342 **Prerequisite:** NA
Number of Periods: 4

The World History course, aligned with the History–Social Science Content Standards for California Public Schools (World History, Culture, and Geography: The Modern World), offers students a comprehensive overview of pivotal moments in modern history. This course dives into the profound effects of the Industrial Revolution across England, France, Germany, Japan, and the United States, detailing how it reshaped these societies and their economic structures. It progresses to a thorough examination of the causes and courses of the First World War, analyzing its deep geopolitical impacts and the transitions it prompted in global power dynamics. Students will also explore the intricate causes and far-reaching consequences of World War II, understanding both the immediate and long-term effects on global politics, economies, and societies. The course extends into the post-World War II era, discussing significant international developments, the realignment of nations, and the emergence of new global powers and international relationships. Additionally, this course includes a special focus on nation-building in the contemporary world, examining case studies in regions such as the Middle East, Africa, Mexico, other parts of Latin America, and China. Through this lens, students will assess the challenges and outcomes of nation-building efforts in diverse political and cultural contexts. This holistic approach not only enhances students' understanding of historical events but also encourages critical thinking about their impact on current global interactions and the shaping of modern societies.

Human Geography

Couse Code:	SS1339	**Prerequisite:**	NA
Number of Periods:	4		

The Human Geography course, aligned with The College Board's AP standards, introduces students to the systematic study of human interactions with Earth's surface. This course explores how human patterns, processes, and cultural interactions have shaped our understanding and alteration of the world. Employing spatial concepts and landscape analysis, students assess the socioeconomic organization and its environmental impacts. Students will engage with various global issues through case studies that highlight the spatial and problem-oriented nature of geography. Topics covered include the implications of economic development, cultural change, population dynamics, international migration, and technological innovations on transportation, communication, and industrialization. The course also examines agricultural land use, industrial development, urban challenges, climate change, and environmental impacts on human landscapes. The aim of the course is to enhance students' geoliteracy, engagement with global issues, and understanding of multicultural perspectives. Students will develop critical geographical skills, utilizing maps, geospatial technologies, and geographic concepts like scale, region, diffusion, interdependence, and spatial interaction. This course prepares students to view geography as a relevant discipline for problem-solving, global citizenship, and environmental stewardship in today’s interconnected world.

Category 7 – English

The English elective provides students with an opportunity to develop essential communication skills through the Journalism course, which emphasizes critical thinking, research, writing, and media literacy. This course equips students with the tools to effectively gather, analyze, and report information, fostering responsible storytelling and ethical media practices.

Students will enhance their writing proficiency, learn how to evaluate sources, and create content that reflects current events and societal issues, preparing them for future academic and career paths in media, communication, and related fields.

The following table lists the Journalism course under the English elective category, available for Grades 10-12, offering 1.0 credit upon completion:

Elective Courses			
Category	**Course**	**Grade**	**Credit**
English	Journalism (ENG1313)	10, 11, or 12	1.0

Journalism

Couse Code: ENG1313 **Prerequisite:** NA
Number of Periods: 4

The Journalism course, aligned with Utah's Secondary Supplemental Standards for ELA-Journalism, equips students with a comprehensive understanding of media law, ethics, and the essentials of the press across various platforms. This course emphasizes critical evaluation of diverse media forms and teaches students to effectively utilize reporting and writing processes to craft coherent media stories. Embracing multimedia journalism, students gain practical skills in photo, video, and audio production, recognizing the significant role multimedia plays in contemporary storytelling. Additionally, the course fosters skills in applying technology and design principles relevant to journalism. Leadership and management skills are developed, enhancing students' ability to produce media content. Furthermore, the curriculum focuses on fostering good digital citizenship and promoting best practices in social media usage, ensuring students not only create but also interact responsibly within the digital landscape. This course aims to develop informed journalists who can navigate and influence the media landscape with ethical integrity and innovative storytelling techniques.

Arabic Language اللغة العربية

تهدف مقررات اللغة العربية إلى تعزيز مهارات الطلاب في القراءة، الكتابة، التحليل، والتعبير الشفهي باللغة العربية، مع التركيز على تعميق فهمهم للأدب العربي والثقافة العربية. يعتمد المنهج على دراسة النصوص الأدبية والمعلوماتية، مما يتيح للطلاب تطوير مهارات التفكير النقدي وتحليل النصوص، بالإضافة إلى تحسين قدراتهم اللغوية في الكتابة الأكاديمية والتعبير الإبداعي.

تركز المناهج الدراسية من الصف التاسع حتى الصف الثاني عشر على إثراء المفردات وتعزيز مهارات التواصل الفصيح، إلى جانب تنمية الوعي الثقافي من خلال استكشاف الأعمال الأدبية والشعرية من عصور مختلفة. كما تسعى الدورات إلى غرس حب اللغة العربية وتعزيز تقدير جمالياتها الأدبية، مما يُمكن الطلاب من التفاعل بفعالية مع النصوص وتحليلها بأسلوب عميق ومنهجي.

يتم دمج التكنولوجيا في العملية التعليمية لتعزيز التعلم الرقمي، وتشجيع الطلاب على البحث التفاعلي والنشر الإلكتروني، مما يعزز مهاراتهم في التواصل الرقمي .كما يتم تشجيعهم على المشاركة في النقاشات التعليمية لتطوير مهارات الإقناع والتعبير عن الأفكار بوضوح وثقة. بالإضافة إلى ذلك، يعمل البرنامج على تطوير مهارات الكتابة الأكاديمية من خلال إنتاج نصوص تعبر عن أفكار مركزية واضحة ومنظمة، مع الالتزام بقواعد اللغة السليمة واستخدام الأساليب البلاغية المناسبة. يسعى قسم اللغة العربية إلى إعداد الطلاب ليكونوا مفكرين نقديين قادرين على التفاعل مع النصوص الأدبية والتحديات المعاصرة بطريقة فعالة وبناءة.

يوضّح الجدول التالي مقررات اللغة العربية في كل مرحلة دراسية، إلى جانب عدد الساعات المعتمدة التي يحصل عليها الطالب عند إتمامها بنجاح:

المادة: اللغة العربية		
المادة	الصف	وحدة دراسية
اللغة العربية (AR901)	09	1.0
اللغة العربية (AR1001)	10	1.0
اللغة العربية (AR1101)	11	1.0
اللغة العربية (AR1201)	12	1.0

وصف المنهاج – اللغة العربية – الصف التاسع

كود المادة: AR901 **المتطلبات المسبقة:** AR801
عدد الحصص: 4

هذا المنهج مصمم لتعميق فهم الطلاب للأدب العربي من خلال استكشاف مختلف النصوص الأدبية بما في ذلك الشعر والنثر. سيركز الطلاب على تحديد الأفكار الرئيسية والتفاصيل الداعمة في النصوص الأدبية، وتحليل كيفية تأثير اختيارات الكاتب في الكلمات والأساليب الأدبية على فهم وتقدير النص. من خلال قراءة النصوص المعلوماتية والأدبية بشكل شمولي، سيطور الطلاب مهاراتهم في تحديد الفكرة المركزية واستنباط العلاقات بين النصوص المختلفة، مما يعزز معرفتهم وفهمهم للثقافة العربية. كما سيُشجع الطلاب على إنتاج نصوص كتابية تعبر عن أفكار مركزية واضحة، تظهر مقدرتهم على التنظيم والتركيز، وتعكس فهمهم العميق للموضوعات التي يتناولونها. سيتعلم الطلاب كيفية البحث عن المعلومات وتطبيقها بشكل فعال في كتاباتهم التي تستند إلى أغراض محددة وتتناسب مع الغرض من الكتابة. ستُستخدم التكنولوجيا بنشاط في هذا المساق لتعزيز النشر الرقمي والتفاعل مع الآخرين، مع التركيز على تطوير مهارات الطلاب في استخدام الوسائل الرقمية للعروض البصرية وفهم المادة المعروضة. الطلاب أيضًا سيشاركون في نقاشات تعليمية مثرية، مما يعزز قدرتهم على التواصل باللغة العربية الفصيحة وتقديم المعلومات والأدلة بطريقة مقنعة. بالإضافة إلى ذلك، سيُكتسب الطلاب مفردات جديدة ويُنمّون معجمهم اللغوي من خلال التعرض المستمر لمواقف غنية لغويًا، مما يعزز فهمهم للمفاهيم النحوية والصرفية ويُطبقونها بشكل صحيح في كتاباتهم.

وصف المنهاج – اللغة العربية – الصف العاشر

كود المادة: AR1001 **المتطلبات المسبقة:** AR901
عدد الحصص: 4

يهدف هذا المنهج إلى تعميق فهم الطلاب للغة العربية وآدابها من خلال دراسة متأنية للنصوص الأدبية المتنوعة، بما في ذلك الشعر والنثر. سيتعلم الطلاب كيفية تحديد الأفكار الرئيسية والتفاصيل المساندة في النصوص الأدبية، وسيُظهرون قدرتهم على تحليل كيفية تأثير اختيارات الكاتب في الكلمات والأساليب الأدبية على توصيل الرسالة أو الدرس. من خلال النصوص المعلوماتية والأدبية، سيكتسب الطلاب مهارات في تحديد الفكرة المركزية واستنباط العلاقات بين النصوص المختلفة، مما يعزز فهمهم للثقافة والأدب العربي. كما سيركز الطلاب على تطوير مهارات الكتابة الأكاديمية، حيث سيكتبون نصوصًا تعبر عن أفكار مركزية واضحة ومنظمة، مستخدمين اللغة العربية بطريقة فعالة ومُقنعة. سيتم تشجيعهم على إنتاج نصوص سردية ومعلوماتية وإقناعية ووصفية تُظهر مقدرتهم على الالتزام بقواعد اللغة السليمة. بالإضافة إلى ذلك، سيستخدم الطلاب التكنولوجيا للبحث ونشر أعمالهم، مما يُمكنهم من التفاعل بفعالية مع المصادر الرقمية وتقديم المعلومات بطرق مبتكرة. سيشارك الطلاب أيضًا في نقاشات تعليمية، يُعدّون خلالها بمجموعة متنوعة من السياقات التواصلية لعرض أفكارهم بوضوح وإقناع. المنهج يتضمن أيضًا تعميق الفهم النقدي للطلاب من خلال تحليل موسيقا بحور الشعر العربي، مما يعزز تقديرهم لجماليات الشعر العربي ويطور قدرتهم على تحليل الأشكال الشعرية بشكل نقدي وإبداعي.

وصف المنهاج – اللغة العربية – الصف الحادي عشر

كود المادة: AR1101 **المتطلبات المسبقة:** AR1201
عدد الحصص: 4

يهدف هذا المنهج إلى تعميق فهم الطلاب للغة العربية وآدابها، مع التركيز على تحليل النصوص الأدبية والمعلوماتية بعمق. سيتعلم الطلاب كيفية تحديد الأفكار الرئيسية والتفاصيل المساندة وفهم جوانب محددة في النصوص الأدبية، وتحليل الخيارات اللغوية والأساليب التي يستخدمها المؤلفون لتعزيز الرسائل في أعمالهم. سيقوم الطلاب بقراءة مجموعة متنوعة من الأعمال الشعرية والنثرية، وتحليلها لبناء فهم أعمق للفكرة المحورية والرسائل الكامنة وراء النصوص. كما سيستكشفون النصوص المعلوماتية لتحديد الفكرة المركزية واستنتاج العلاقات بين النصوص المختلفة، مما يساهم في تطوير قدراتهم التحليلية والنقدية. سيركز الطلاب أيضًا على تطوير مهارات الكتابة الأكاديمية، حيث سينتجون نصوصًا تعبر عن فكرة مركزية واضحة ومنظمة، تظهر مهاراتهم في التنظيم والتدقيق اللغوي. سيتم تشجيعهم على استخدام التكنولوجيا للبحث ونشر أعمالهم، مما يمكنهم من التفاعل بفعالية مع المصادر الرقمية وتقديم المعلومات بطرق مبتكرة. كما سيشارك الطلاب في نقاشات تعليمية، يعدون خلالها بمجموعة متنوعة من السياقات التواصلية لعرض أفكارهم بوضوح وإقناع. هذا المساق يسعى إلى تعزيز الفهم العميق للغة وآدابها وتقدير الجماليات الأدبية والبلاغية في النصوص العربية.

وصف المنهاج – اللغة العربية – الصف الثاني عشر

كود المادة: AR1201 **المتطلبات المسبقة:** AR1101
عدد الحصص: 4

يهدف هذا المنهج إلى تعميق فهم الطلاب للغة العربية وآدابها، مع التركيز على تحليل النصوص الأدبية والمعلوماتية بعمق. سيتعلم الطلاب كيفية تحديد الأفكار الرئيسية والتفاصيل المساندة وفهم جوانب محددة في النصوص الأدبية، وتحليل الخيارات اللغوية والأساليب التي يستخدمها المؤلفون لتعزيز الرسائل في أعمالهم. سيقوم الطلاب بقراءة مجموعة متنوعة من الأعمال الشعرية والنثرية، وتحليلها لبناء فهم أعمق للفكرة المحورية والرسائل الكامنة وراء النصوص. كما سيستكشفون النصوص المعلوماتية لتحديد الفكرة المركزية واستنتاج العلاقات بين النصوص المختلفة، مما يساهم في تطوير قدراتهم التحليلية والنقدية. سيركز الطلاب أيضًا على تطوير مهارات الكتابة الأكاديمية، حيث سينتجون نصوصًا تعبر عن فكرة مركزية واضحة ومنظمة، تظهر مهاراتهم في التنظيم والتدقيق اللغوي. سيتم تشجيعهم على استخدام التكنولوجيا للبحث ونشر أعمالهم، مما يمكنهم من التفاعل بفعالية مع المصادر الرقمية وتقديم المعلومات بطرق مبتكرة. كما سيشارك الطلاب في نقاشات تعليمية، يعدون خلالها بمجموعة متنوعة من السياقات التواصلية لعرض أفكارهم بوضوح وإقناع. هذا المساق يسعى إلى تعزيز الفهم العميق للغة وآدابها وتقدير الجماليات الأدبية والبلاغية في النصوص العربية.

Islamic Studies التربية الإسلامية

تهدف مقررات التربية الإسلامية إلى ترسيخ القيم الإسلامية وتعزيز فهم الطلاب لعلوم الدين من خلال دراسة القرآن الكريم والسنة النبوية الشريفة، وتطبيق الأحكام الشرعية في حياتهم اليومية. يركز البرنامج على بناء شخصية إسلامية معتزة بهويتها وقادرة على مواجهة التحديات المعاصرة بمنهجية علمية مستمدة من المبادئ الإسلامية.

تتدرج مقررات التربية الإسلامية من الصف التاسع إلى الصف الثاني عشر لتعميق المعارف الدينية للطلاب في مجالات العقيدة، الفقه، السيرة النبوية، وعلوم القرآن والحديث .كما تهدف هذه المقررات إلى تعزيز مهارات التفكير النقدي والإبداعي لدى الطلاب في فهم النصوص الشرعية وتحليلها، إلى جانب تطوير مهارات التواصل الفعّال باستخدام اللغة العربية الفصحى. يُشجع الطلاب على استنباط الأحكام الشرعية وتطبيقها بطريقة تعزز من إسهاماتهم في المجتمع وتُساعدهم على اتخاذ قرارات مستنيرة بناءً على المبادئ والقيم الإسلامية.

علاوة على ذلك، يُركز البرنامج على تعزيز الانتماء الثقافي والديني من خلال دراسة سيرة النبي محمد صلى الله عليه وسلم والشخصيات الإسلامية البارزة التي أثرت في مسيرة الإسلام. كما يتناول القضايا والتحديات المعاصرة التي تواجه المجتمعات، ويُساعد الطلاب على تحليلها وإيجاد حلول مستنيرة تستند إلى الأحكام الشرعية، مما يؤهلهم ليكونوا أفرادًا فاعلين ومسؤولين في مجتمعاتهم وفي العالم الإسلامي.

يوضّح الجدول التالي مقررات التربية الإسلامية في كل مرحلة دراسية، إلى جانب عدد الساعات المعتمدة التي يحصل عليها الطالب عند إتمامها بنجاح:

المادة: التربية الإسلامية		
المادة	**الصف**	**وحدة دراسية**
التربية الإسلامية (ISL901)	09	0.5
التربية الإسلامية (ISL1001)	10	0.5
التربية الإسلامية (ISL1101)	11	0.5
التربية الإسلامية (ISL1201)	12	0.5

وصف المنهاج – التربية الإسلامية – الصف التاسع

كود المادة: ISL901 **المتطلبات المسبقة:** ISL801
عدد الحصص: 2

في منهج التربية الإسلامية للصف التاسع، يُظهر الطالب مهارة متقدمة في حفظ القرآن الكريم وفهم معانيه وعلومه، مع تطبيق دقيق لأحكام تلاوته. كذلك، يحفظ الطالب الأحاديث النبوية الشريفة، يفهم معانيها ويطبق أحكامها بفاعلية. يتعمق الطلاب في فهم أسس الإيمان بالله تعالى، صفاته، الملائكة، الكتب المقدسة والرسل، ويُظهرون وعيًا بأهمية العقل والتفكير النقدي في استنباط الأحكام وفهم الدين. يتم تعزيز فهم القيم الإسلامية الفردية والجماعية في سلوكهم اليومي. الطلاب يتعلمون فقه العبادات ويؤدونها بشكل صحيح، ويستزيدون معرفتهم بقواعد الأحكام الشرعية. يدرس الطلاب سيرة النبي محمد صلى الله عليه وسلم، يقتدون به كأسوة حسنة في جميع جوانب الحياة، ويتعرفون على شخصيات إسلامية بارزة أثرت في تاريخ الإسلام والمسلمين. كما يُظهر الطلاب اعتزازًا بشخصيتهم، هويتهم، ووطنهم، ويقدرون تراثهم وثقافتهم، ملتزمين بالعادات والتقاليد الإسلامية. يتم تجهيزهم لفهم القضايا والتحديات المعاصرة، وتحليلها، وإيجاد حلول لها بناءً على المبادئ والأحكام الإسلامية، مما يُعدّهم لمواجهة التحديات بفعالية وبصيرة.

وصف المنهاج – التربية الإسلامية – الصف العاشر

كود المادة: ISL1001 **المتطلبات المسبقة:** ISL901
عدد الحصص: 2

في منهج التربية الإسلامية للصف العاشر، يتعمق الطلاب في دراسة وحفظ القرآن الكريم، مع إظهار مهارات عالية في فهم معانيه وعلومه، وتطبيق أحكام تلاوته بكفاءة. يدرس الطلاب مكانة السنة النبوية في التشريع الإسلامي، ويقدرون الجهود التي بذلها العلماء في تدوينها، مما يُعمق فهمهم لعلوم الحديث. يحلل الطلاب نصوصًا شرعية تتعلق بالعقيدة الإسلامية، مستخدمين منهجية الإسلام في بناء العقل المسلم، وتطبيقاتها في التفكير الناقد والإبداعي. يُظهر الطلاب فهمًا وتطبيقًا عميقًا لقيم الإسلام الفردية والجماعية في سلوكهم اليومي، بالإضافة إلى آداب الإسلام. في مجال الفقه، يدرس الطلاب فقه المعاملات ويستخلصون تأثيره في تحسين المجتمع. كما يتعمقون في فهم الأحكام الشرعية وقواعدها. يتعلم الطلاب عن سيرة النبي محمد صلى الله عليه وسلم، يتأسون به كنموذج مثالي في جميع جوانب الحياة، ويدرسون شخصيات إسلامية بارزة كان لها دور كبير في خدمة الإسلام والمسلمين. الطلاب يُظهرون اعتزازًا بشخصيتهم وهويتهم ووطنهم، ويُقدّرون تراثهم وثقافتهم ويلتزمون بعاداتهم وتقاليدهم. يُطورون مهارات في فهم القضايا والتحديات المعاصرة ويجدون حلولًا لها مستندين إلى المبادئ والأحكام الإسلامية، مما يجعلهم مستعدين لمواجهة التحديات العالمية بنجاح.

وصف المنهاج – التربية الإسلامية – الصف الحادي عشر

كود المادة: ISL1101 **المتطلبات المسبقة:** ISL1001
عدد الحصص: 2

منهج التربية الإسلامية للصف الحادي عشر يشمل عدة جوانب رئيسية تهدف إلى تعميق فهم الطلاب للعلوم الإسلامية وتطبيقها في الحياة اليومية. الطلاب يظهرون حفظًا متقنًا للقرآن الكريم، مع فهم عميق لمعاني الآيات والسياقات الشرعية المرتبطة بها، ويطبقون أحكام التلاوة بدقة. يتعرف الطلاب على مكانة السنة النبوية في التشريع الإسلامي، ويقدرون الجهود المبذولة في تدوين الأحاديث الشريفة، مما يعمق فهمهم لعلوم الحديث. يُظهر الطلاب القدرة على تحليل نصوص شرعية خاصة بالعقيدة الإسلامية، مستخدمين أدوات التفكير الناقد والإبداعي التي ترسخها منهجية الإسلام في بناء العقل المسلم. في مجال الفقه، يغطي البرنامج فقه المعاملات، حيث يستخلص الطلاب أثر هذه الأحكام في تنظيم المجتمع وتحقيق العدالة. كما يتعمق الطلاب في فهم الأحكام الشرعية وقواعدها، مما يمكنهم من فهم أعمق للشريعة الإسلامية. الطلاب يتعلمون عن سيرة النبي محمد صلى الله عليه وسلم، ويأخذونه كأسوة حسنة في جوانب الحياة كافة، كما يتعرفون على شخصيات إسلامية بارزة ساهمت في خدمة الإسلام والمسلمين. يُظهر الطلاب اعتزازًا بشخصيتهم وهويتهم وتقديرهم لتراثهم وثقافتهم. كما يتناول البرنامج القضايا والتحديات المعاصرة، حيث يُظهر الطلاب قدرة على تحليلها وإيجاد حلول لها استنادًا إلى المبادئ الإسلامية، مما يُعزز من قدراتهم على المساهمة بفعالية في مجتمعهم والعالم.

وصف المنهاج – التربية الإسلامية – الصف الثاني عشر

كود المادة: ISL1201 **المتطلبات المسبقة:** ISL1101
عدد الحصص: 2

منهج التربية الإسلامية للصف الثاني عشر يهدف إلى تعميق فهم الطلاب للقرآن الكريم والسنة النبوية مع التطبيق العملي لأحكامهما. يظهر الطالب حفظًا متقنًا للقرآن الكريم، مع إدراكًا عميقًا لمعانيه وعلومه المختلفة، ويطبق أحكام التلاوة بدقة. كذلك، يحظى الطلاب بفهم واضح لمكانة السنة النبوية في التشريع الإسلامي، مع تقدير كبير للجهود المبذولة في تدوينها وعلومها. الطلاب يحللون نصوصًا شرعية تتعلق بالعقيدة الإسلامية، مما يعزز من قدرتهم على التفكير الناقد والإبداعي في فهم الدين. يظهر الطلاب وعيًا بمنهجية الإسلام في بناء العقل المسلم وتطبيقاتها في مختلف جوانب الحياة، مما يساعدهم على فهم وتمثل القيم الإسلامية الفردية والجماعية في سلوكهم اليومي. يغطي البرنامج كذلك فقه المعاملات، حيث يستخلص الطلاب أثر هذه الأحكام في تنظيم المجتمع ويفهمون قواعد الأحكام الشرعية بعمق، مما يمكنهم من التطبيق العملي الصحيح. يتعلم الطلاب عن سيرة الرسول محمد صلى الله عليه وسلم كنموذج كامل وأسوة حسنة، ويقتدون بشخصيات إسلامية بارزة أثرت في خدمة الإسلام. أخيرًا، يتعامل الطلاب مع القضايا والتحديات المعاصرة، ويظهرون قدرة على تحليل هذه المسائل وإيجاد حلول لها استنادًا إلى المبادئ والأحكام الإسلامية، مما يعزز من تطورهم كأفراد مسؤولين ومدركين لدورهم في المجتمع.

Social Studies التربية الوطنية والدراسات الاجتماعية

تهدف مقررات الدراسات الاجتماعية إلى تعزيز فهم الطلاب للتاريخ والجغرافيا والسياسة والاقتصاد من خلال استكشاف الأحداث والشخصيات التاريخية والتطورات التي أثرت في تشكيل المجتمعات عبر العصور .تسعى هذه المقررات إلى تطوير مهارات التفكير النقدي والتحليلي لدى الطلاب، وتمكينهم من فهم الأنماط التاريخية والعلاقات بين الأحداث والأفكار وتأثيرها على الثقافات والحضارات.

تتضمن مناهج الدراسات الاجتماعية دراسة الخصائص الجغرافية والبيئية ودور الإنسان في التفاعل مع بيئته وتشكيل مجتمعات مستدامة .كما يتم التركيز على فهم الأنظمة الحكومية والهويات الوطنية، وتعزيز الوعي حول الأدوار والمسؤوليات المدنية للأفراد في المجتمع. في الجانب الاقتصادي، يتعرف الطلاب على المبادئ الاقتصادية الأساسية وكيفية عمل الأسواق، بالإضافة إلى تأثير السياسات الاقتصادية على المستوى الوطني والدولي .يتم تشجيع الطلاب على تحليل المصادر التاريخية وتقييم المعلومات لتكوين آراء مستنيرة وتقديم حجج مدعومة بالأدلة في المناقشات العلمية. كما يعزز البرنامج استخدام التكنولوجيا لجمع المعلومات والتعاون مع الآخرين لاستكشاف المواضيع الاجتماعية المعقدة، مما يُمكن الطلاب من تطوير رؤية عالمية وفهم أعمق للمفاهيم الاجتماعية والثقافية، وتأهيلهم للمشاركة بفاعلية في القضايا المعاصرة وتحليلها بمسؤولية ووعي.

يوضّح الجدول التالي مقررات التربية الوطنية والدراسات الاجتماعية للصف التاسع، إلى جانب عدد الساعات المعتمدة التي يحصل عليها الطالب عند إتمامها بنجاح:

المادة: التربية الوطنية والدراسات الاجتماعية		
المادة	الصف	وحدة دراسية
التربية الوطنية والدراسات الاجتماعية (SST902)	09	0.5

وصف المنهاج – التربية الوطنية والدراسات الاجتماعية – الصف التاسع

كود المادة: SST902 **المتطلبات المسبقة:** SST801
عدد الحصص: 2

يُعنى هذا المنهج بتطوير فهم الطلاب لكيفية تأثير الشخصيات التاريخية والأحداث الرئيسية والتطورات المهمة في تشكيل المجتمعات المختلفة في المنطقة وعلى مر العصور. يكتسب الطلاب معرفة معمقة حول دور هذه العناصر في تحديد مسار التاريخ وكيفية تأثيرها على الثقافات والحضارات. يُظهر الطلاب فهمًا لأنماط الثبات والتحول التي شهدها العالم عبر الزمن، ويدرسون العلاقات بين الأشخاص والأحداث والتفسيرات المرتبطة بها. كما يغطي المقرر دراسة الأرض وخصائصها الجغرافية والبيئية، ويستكشف الطلاب كيفية تفاعل الإنسان مع هذه الخصائص عبر الزمان والمكان. يتعلم الطلاب عن الديناميكيات بين المجتمعات البشرية والبيئات التي يعيشون فيها، مع التركيز على السياسات البيئية والاستدامة. يناقش الطلاب أيضًا الجوانب الوطنية، حيث يتعمقون في فهم كيف ساهمت عوامل مختلفة في تشكيل الهويات الوطنية والمجتمعية. يتعلم الطلاب عن أسس الحكومة وأنواعها المختلفة والأدوار الأساسية لأفراد المجتمع في نظام الحكم. في الجانب الاقتصادي، يدرس الطلاب المبادئ الاقتصادية الأساسية ويتفحصون كيفية عمل الأسواق والتأثير الاقتصادي للسياسات الحكومية على المستويين الوطني والعالمي. يتعلم الطلاب كيفية تحليل المصادر وتقييم البيانات لتكوين آراء مستنيرة وتقديم حجج قوية تدعم وجهات نظرهم. وأخيرًا، يُظهر الطلاب كفاءة في استخدام التكنولوجيا لجمع المعلومات والتعاون مع الآخرين لاستكشاف مواضيع معقدة، مما يمكنهم من المشاركة الفعالة في مناقشات علمية وتطوير فهم أعمق للمفاهيم الاجتماعية والثقافية.

Moral Education التربية الأخلاقية

تهدف مقررات التربية الأخلاقية إلى تعزيز القيم الإنسانية وغرس مفاهيم المسؤولية الفردية والمجتمعية لدى الطلاب، من خلال مناقشة مجموعة من القضايا الأخلاقية المعاصرة التي تؤثر على المجتمعين المحلي والعالمي. تسعى هذه المقررات إلى تمكين الطلاب من اتخاذ قرارات أخلاقية واعية وتطوير وعي نقدي حول القضايا المدنية والاجتماعية والثقافية التي تواجه العالم اليوم .يركز البرنامج على غرس مبادئ المواطنة الصالحة وتعزيز الاحترام المتبادل والتسامح والعدالة الاجتماعية .كما يتم تدريب الطلاب على تحليل القضايا الأخلاقية وفهم تداعيات العولمة وتقدير التنوع الثقافي، مع التركيز على أهمية التطوع والمشاركة في الحياة المدنية لتحسين المجتمع.

من خلال مناهج التربية الأخلاقية، يتعلم الطلاب كيفية إدارة النزاعات بطريقة سلمية، وفهم الحقوق والمسؤوليات في عالم مترابط، مما يُمكّنهم من المساهمة الفعالة في بناء مجتمع مستدام .كما يعزز البرنامج التفكير الإبداعي والنقدي، ويوفر للطلاب الفرص لتطبيق المفاهيم الأخلاقية عمليًا عبر مشاريع بحثية وتطوعية، مما يُعدّهم ليكونوا أفرادًا مسؤولين وأخلاقيين قادرين على مواجهة التحديات المعاصرة والمشاركة بإيجابية في مجتمعاتهم المحلية والعالمية.

يوضّح الجدول التالي مقررات التربية ألأخلاقية في كل مرحلة دراسية، إلى جانب عدد الساعات المعتمدة التي يحصل عليها الطالب عند إتمامها بنجاح:

المادة: التربية الأخلاقية		
المادة	الصف	وحدة دراسية
التربية الأخلاقية (ME901)	09	0
التربية الأخلاقية (ME1001)	10	0
التربية الأخلاقية (ME1101)	11	0
التربية الأخلاقية (ME1201)	12	0

وصف المنهاج – التربية الأخلاقية – الصف التاسع

كود المادة: ME901 **المتطلبات المسبقة:** ME801
عدد الحصص: 1

يتناول منهج التربية الأخلاقية للصف التاسع القضايا الأخلاقية في العلاقات الدولية، مستكشفًا الأسئلة الأخلاقية الأساسية في عالم يزداد عولمةً وأهمية العمل الإنساني الجماعي. يغطي المنهج أيضًا إدارة الأموال الشخصية كالميزانيات والادخار والاستثمار، مع التركيز على الأنظمة المالية بالإمارات العربية المتحدة.كما يشجع الطلاب على تقدير الأشياء والمحافظة عليها، ويعزز الوعي المجتمعي بالقضايا المدنية والسياسية، ويدعو للانخراط في الحياة المدنية من خلال التطوع، والاطلاع على القضايا الاجتماعية الراهنة، مما يعزز المسؤولية والفعالية الشخصية تجاه المجتمع.

وصف المنهاج – التربية الأخلاقية – الصف العاشر

كود المادة: ME1001 **المتطلبات المسبقة:** ME901
عدد الحصص: 1

يتناول منهج التربية الأخلاقية للصف العاشر تأثيرات العولمة الاقتصادية وتداعياتها المتنوعة، بما في ذلك الفجوة بين الأغنياء والفقراء على المستويين الوطني والدولي، ويستكشف مفاهيم التجارة العالمية والتجارة العادلة والاستثمار المسؤول اجتماعيًا. يركز المنهج على تقدير الذات والهوية من خلال تجنب مخاطر الإدمان والتدخين والمخدرات، بينما يعزز الوعي المجتمعي عبر دعم الأشخاص المتأثرين بمشاكل كالإدمان والسمنة في المجتمع. كما يتناول أيضًا فهم تفاعل الثقافات مع بعضها البعض وحماية الفرد ضمن المجتمع، مستكشفًا جوانب الرفاهية الاجتماعية والثقافية لمواطني الإمارات. يشجع الطلاب على الانخراط في الحياة المدنية وتبني نهج فعال في تأدية الواجبات تجاه الوطن، مع التوعية بفرص العمل التطوعي.

وصف المنهاج – التربية الأخلاقية – الصف الحادي عشر

كود المادة: ME1101 **المتطلبات المسبقة:** ME1001
عدد الحصص: 1

يُركز منهج التربية الأخلاقية للصف الحادي عشر على تعميق فهم الطلاب حول مفاهيم السلام ونبذ العنف والصراع والحرب، مستعرضًا المبادئ الأساسية لنظرية الحرب العادلة وتبني الوسائل السلمية لتسوية النزاعات بما في ذلك الممارسات غير العنيفة. يشجع المنهج الطلاب على التفكير في الإنجازات الشخصية وتطوير مهارات العرض الفعال لزيادة الوعي المجتمعي، بما في ذلك استكشاف الخيارات الوظيفية المتاحة في عالم القرن الحادي والعشرين. كما يتناول البرنامج الثقافة الإنسانية المشتركة ويعالج التحديات والفرص الناشئة عن الترابط الدولي، مع التأكيد على الأنظمة القضائية الدولية وأهمية الحقوق والمسؤوليات في عالم مترابط ومتغير.

وصف المنهاج – التربية الأخلاقية – الصف الثاني

كود المادة: ME1201 **المتطلبات المسبقة:** ME1101
عدد الحصص: 1

في السنة الأخيرة من منهج التربية الأخلاقية، تُمنح الوحدة النهائية لطلاب الصف الثاني عشر الفرصة لاستكشاف وتعميق فهمهم لقيمهم ومبادئهم الأخلاقية. تُعد هذه السنة جوهرية لمراجعة الموضوعات الرئيسية التي تناولها البرنامج على مدار السنوات، مع التركيز بشكل خاص على تطوير فهم معنى كون المرء مواطنًا مسؤولًا وأخلاقيًا. سيعمل الطلاب على تطبيق المفاهيم النظرية في مشاريع فردية يختارونها بأنفسهم، حيث سيُطلب من كل طالب تحديد نطاق المشروع، وتخطيطه، وتنفيذه. تشمل هذه المشاريع إجراء بحوث معمقة، تحليل البيانات، وتطوير مهارات العرض، مما يمكنهم من تقديم فهم نقدي للمفاهيم الأخلاقية الأساسية والاعتبارات المتعلقة بالموضوع الذي اختاروه.

Appendix

Appendix 1 – Four Year Academic Plan

This form allows students and parents to track the courses successfully completed by the students at IPS High School.

Student Name:		**Grade:**	
Student ID:		**Section:**	

Grade 09		
Course	**Core or Elective**	**Credit**

Grade 10		
Course	**Core or Elective**	**Credit**

Grade 11		
Course	**Core or Elective**	**Credit**

Grade 12		
Course	**Core or Elective**	**Credit**

ARABIAN EDUCATION DEVELOPMENT

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