

**School of Modern Skills**  
**High School Electives Course Guide**  
**2023 - 2024**



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## **Vision, Mission and Values**

### **Vision**

A thriving learning community guided by UAE cultural values which empowers all students to be confident leaders and successful global citizens.

### **Mission**

School of Modern Skills provides a comprehensive education experience that fosters innovation, celebrates academic achievement, and develops compassionate, respectful and creative leaders.

### **Values**

- Whole self
- Community
- Inclusivity
- Commitment
- Respect
- Active learning
- Contact Information

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## Introduction

We are excited to share with you our elective course offerings for the 2023-2024 school year. For next school year we have been able to expand our electives, including the addition of several more Advanced Placement classes.

The following electives course guide is designed to support our students with selecting their electives in High School. Elective courses provide students with the opportunity to:

- Explore their interests
- Develop their passions
- Grow their knowledge
- Understand new concepts
- Improve their skills

When selecting your elective courses, students should consider the following:

- Graduation Requirements
- University Applications
- University Course Requirements
- Interests and Passions

SMS has many support structures in place to help you make your decision:

- Subjects Nights for parents and students
- Career Guidance classes
- One-to-one sessions with the Career Guidance team
- Subject talks led by the Subject Leads

## Graduation Requirements

The curriculum of SMS is designed to provide each student the opportunity to reach his/her maximum potential; develop intellectually, physically, socially and spiritually; grow as inquisitive, engaged and motivated learners and celebrate the values of respect, commitment and inclusivity.

Our curriculum is relevant, comprehensive and promotes innovation and challenge. The themes of enquiry based learning and student-centered planning run throughout. It offers a diverse and full range of hands-on teaching methods and individualized instruction.

Our advisory, electives, experiential learning, and extracurricular offerings further build important executive skills and competencies that allow students to discover and nurture their abilities and interests. SMS offers courses in which students can earn credits during the year. Semester and year long courses are offered with a standards-based grading system.

## Overall Graduation Requirements



Subject	Credits
English Language	4
Mathematics	3
Science	3 (must include Physics)
Arabic Language	4
Islamic Education (For Muslims)	2
Social Studies	2
World Language - French	2
Physical Education	2
Visual / Performing Arts	0.5
Core Electives	2 (1 Science,1 Math)
Electives	3.5
Total Maximum Credits	28
Total Minimum Credits	24

- All students in Grade 9 are required to take one year of UAE social studies.
- All students are required to take 4 years of MOE Moral Education from 9-12
- Graduates of the Class of 2025 will be required to complete a Community Service component.
- Current Grade 9 students will graduate with a total of 6.5 electives credits by Grade 12



## **Pathway to Graduation**

Students in High School take High School Diploma courses. These courses were developed in response to the diverse needs and career paths of our student body. The High School courses, alongside AP classes, are ideal for students seeking greater specialization and those who are looking for a more flexible program.

## **Advanced Placement**

### **(AP) Courses**

The Advanced Placement ® (AP) enables willing and academically prepared students to pursue college-level studies while still in high school. AP courses are modeled after comparable introductory level university courses and culminate in a standardized college-level assessment or AP Exam. AP Exams are given in May each year at testing locations worldwide.

AP courses are rigorous courses and require students to meet prerequisites in order to register for these courses. Specific prerequisites for each course can be found alongside the course description in this booklet. SMS for this academic year is giving the students the option to sit for the AP exam in May. It's important to know that this is subject to change in the near future and it will be part of the graduation requirements for all students to have at least two AP subjects on their report cards.

## **AP Capstone Diploma**

The AP Capstone Program is a culminating two-year credential program where students develop and apply their skills and knowledge to real world phenomena that they are personally interested in researching. This College Board program emphasizes critical thinking, problem solving, research, investigation, analysis, and argumentative writing and presentation skills. Rather than subject-specific or content-based courses, the seminar and research courses utilize an interdisciplinary approach to learning that better prepares students for higher education. The first cohort will graduate in 2026.





AP Capstone  
Diploma™

**AP Seminar**  
Year 1  
Earn score of 3 or higher

**AP Research**  
Year 2  
Earn score of 3 or higher

**4 AP Exams**  
Throughout High School  
Earn score of 3 or higher



AP Seminar  
and Research  
Certificate™



## English Elective Courses

1. AP Seminar
2. Creative Writing
3. Theater and Drama
4. Public Speaking
5. AP English Language and Composition





## **Course Title: AP Seminar**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 10**

**Prerequisites: No prerequisite**

### **Course Description:**

AP Seminar is a foundational course that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Students learn to investigate a problem or issue, analyze arguments, compare different perspectives, synthesize information from multiple sources, and work alone and in a group to communicate their ideas.

### **Purpose:**

AP Seminar is an interdisciplinary course that encourages students to demonstrate critical thinking, collaboration, and academic research skills on topics of the student's choosing.

### **Skills you will acquire:**

- Reading and analyzing articles, studies and other texts
- Gathering and combining information from sources
- Viewing an issue from multiple perspectives
- Crafting arguments based on evidence



## **Course Title: Creative Writing**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9 and 10**

**Prerequisites: No prerequisite**

### **Course Description:**

Creative Writing is a semester course. The course will focus on expressive writing in many different forms. Original writing that shows thought will be emphasized. Strategies to avoid writer's block and new ways to uncover ideas for writing will also be studied. Peer review and sharing ideas are essential elements of this course.

### **Purpose:**

Creative Writing helps students to develop their individual writing and self-editing skills for any form of writing creation and to obtain an understanding of the history of fiction and non-fiction writing. You will expand your imagination, creativity, originality and written communication skills.

### **Skills you will acquire:**

- Exploring different forms of creative writing, such as short stories, poetry, memoir/narrative pieces, creative nonfiction, script writing, and journaling.
- Mini-lessons and practice in Creative Writing skills, including Ideas, Word Choice, Voice, Dialogue, Characterization, etc.
- Analyzing mentor texts (the writing of published authors) as models for improving and expanding your creative writing skills and tools.
- Evaluating your own writing and that of your peers as a member of a safe and supportive community of writers.



## **Course Title: Theater and Drama**

**Length/Credit: 1 Semester / 0.5 credit**

**Grade Eligibility: Grades 9, 10, 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

Introduction to Theater Arts and Drama, students will explore themselves and the world around them, through performance and acting skills, set and costume design and construction, scene studies and playwriting. Students will be challenged to take risks, move outside of their current comfort zones, and use their imaginations to devise new pieces of theatre. Students will have the opportunity to choose a role, whether on the stage, or behind the scenes, that is just right for them, and will work collaboratively with their peers to complete creative projects.

Grades will be based on the students' understanding of the standards mentioned below.

### **Purpose:**

The purpose of this course is to enable students to develop basic knowledge and skills in the elements of theatre arts, with an emphasis on design and technical elements.

### **Skills you will acquire:**

- Community building and positive communication
- Creating the Ensemble: exercises in group and self-awareness
- The art of storytelling and pantomime
- Improvisation for devising an original performance piece
- Writing, editing, and adapting a text for a young audience
- Working collaboratively within a schedule toward a deadline
- Investigating Acting Styles
- The process of creating a production concept through group collaboration
- Various approaches to creating a character
- How to produce a play from start to finish



## **Course Title: Public Speaking**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

This course will not cure the fear of public speaking, but instead give students a safe space to practice and gain skills that will allow them to manage and thrive in public speaking situations. In this course students will give numerous speeches throughout the semester and learn to evaluate a speaker to help themselves grow. Students will practice with small, mini speeches and have 3-4 major speech assignments that we will develop, organize, and perform in a respectful classroom environment focused on growth and engagement.

### **Purpose:**

Taking a public speaking class will improve your speaking skills, help you be a more critical thinker, fine-tune your verbal and nonverbal communication skills, and help you overcome public speaking anxiety.

### **Skills you will acquire:**

After successful completion of this course, students will be able to

- Organize and present a topic orally
- Create a visual aid that is pleasing to the eye and useful to the audience
- Identify' Monroe's Motivated Sequence and Aristotle's Rhetorical Devices
- Display body language appropriate for speaking to an audience
- Use appropriate word choice to create lasting effect in an audience
- Gain confidence when asked to speak to a group of people



## **Course Title: AP English Language and Composition**

**Length/Credit: One Year / 1.0 credit**

**Grade Eligibility: Grade 12**

**Prerequisites: No prerequisite**

### **Course Description:**

The AP English Language and Composition course focuses on the development and revision of evidence-based analytic and argumentative writing, the rhetorical analysis of nonfiction texts, and the decisions writers make as they compose and revise.

### **Purpose:**

This course is designed to prepare students to earn college credit in introductory English and to help students develop the critical thinking skills of interpreting, evaluating, and analyzing a text. Students will use writing as a tool for developing and presenting their own understanding of the basic elements of rhetoric, with emphasis placed on developing a mature personal writing style. While this course primarily focuses on non-fiction texts, some short fiction and poetry may be incorporated into the thematic units.

### **Skills you will acquire:**

- Students will write for a variety of purposes and audiences
- Students will develop their abilities to write essays which establish an insightful thesis.
- Students will improve their skills in revision and editing of their own writing, including their abilities to develop a concise and insightful thesis
- Students will evaluate a variety of sources for relevance, credibility, and tone.
- Students will analyze graphics and visual images as text.



## **Science Elective Courses**

- 1. AP Biology**
- 2. AP Chemistry**
- 3. AP Physics**
- 4. Earth and Environmental Science**
- 5. Organic Chemistry**
- 6. Biochemistry**
- 7. Genetics**
- 8. Human Anatomy**
- 9. Health Science**
- 10. Forensic Science**
- 11. Introduction to Sustainable Development**



## **Course Title: AP Biology**

**Length/Credit: 1 Year / 1.0 credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites:**

- **Baseline Test Completion (60% attainment as a minimum)**
- **Interview**

**Course Description:**

The AP Biology course is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes, energy and communication, genetics, information transfer, ecology, and interactions. Students should be able to describe how to collect data, use data to form conclusions, and apply their conclusions to larger biological concepts. Students should report recorded data and quantitative conclusions drawn from the data with appropriate precision (i.e., significant figures). Students should also develop an understanding of how changes in the design of the experiments would impact the validity and accuracy of their results.

**Purpose**

For prospective science majors, this course provides a solid foundation for higher-level science courses (i.e. pre-med degree programs). For students interested in the physical sciences, this course provides the opportunity to study how the principles of physics & chemistry are applied to living systems. For students NOT interested in pursuing a collegiate science degree, this course provides an excellent opportunity to earn college credit to satisfy your degree programs' mandatory science requirement.

**Skills you will acquire:**

- Organizational skills
- Study Skills
- Critical thinking skills
- Analytical writing skills
- Data analysis



## **Course Title: AP Chemistry**

**Length/Credit : 1 Year / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

### **Prerequisites:**

- Baseline Test Completion (60% attainment as a minimum)
- Subject Teacher Testimony (behavioral and academic)
- High School Chemistry (Grade 10 )
- Algebra

### **Course Description:**

The AP Chemistry course provides students with a college-level foundation to support future advanced coursework in chemistry. Students cultivate their understanding of chemistry through inquiry based investigations, as they explore content such as: atomic structure, intermolecular forces and bonding, chemical reactions, kinetics, thermodynamics, and equilibrium. The AP Chemistry course is designed to be the equivalent of the general chemistry course usually taken during the first college year.

### **Purpose:**

The AP course allows students to cultivate their understanding of chemistry through the inquiry based lab investigations as they explore the 4 big ideas :

- 1) Scale proportions and quantity
- 2) Structure and properties of substances
- 3) Transformation
- 4) Energy

### **Skills you will acquire:**

You will develop skills that can be applied to ANY course of study you choose to pursue in the future:

- Organizational skills
- Study Skills
- Critical thinking skills
- Analytical writing skills
- Data analysis
- Laboratory Skills





## **Course Title: AP Physics 1 Algebra Based**

**Length-Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 12**

### **Prerequisites:**

- **Baseline Test Completion (60% attainment as a minimum)**
- **Subject Teacher Testimony (behavioral and academic)**
- **Interview**

### **Course Description:**

AP Physics is an algebra-based, introductory college-level physics course. Students cultivate their understanding of physics through inquiry-based investigations as they explore these topics: kinematics, dynamics, circular motion and gravitation, energy, momentum, simple harmonic motion, torque and rotational motion, electric charge and electric force, DC circuits, and mechanical waves and sound.

### **Purpose:**

For prospective science majors, this course provides a solid foundation for higher-level science courses (i.e. Engineering programs). For students interested in the physical sciences, this course provides the opportunity to study how the principles of physics & chemistry are applied to living systems. For students NOT interested in pursuing a collegiate science degree, this course provides an excellent opportunity to earn college credit to satisfy your degree programs' mandatory science requirement. Assuming you maintain a high level of interest and enthusiasm throughout the year, you should find the course stimulating and fun.

### **Skills you will acquire:**

You will develop skills that can be applied to ANY course of study you choose to pursue in the future:

- Organizational skills
- Study Skills
- Critical thinking skills
- Analytical writing skills
- Data analysis
- Laboratory Skills



## **Course Title: Earth and Environmental Science**

**Length-Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 12**

**Prerequisites: No prerequisites**

This is an introductory course that has no prerequisites and is primarily for non-science majors.

### **Course Description:**

This course seeks to introduce students to the earth and the intricate workings of our earth's systems. Weather, oceanography, volcanoes, earthquakes, rocks and minerals, and environmental issues are all covered as part of this course. Major lab write-ups and research reports are frequently required. This course will build on the middle school ideas and skills in earth science and allow high school students to explain more in-depth phenomena central not only to earth science, but to life and physical sciences as well.

### **Purpose:**

Earth science affects our everyday lives. For example, meteorologists study the weather and watch for dangerous storms. Hydrologists examine water and warn of floods. They measure and collect samples (such as rocks or river water), then record their findings on charts and maps.

Earth scientists make a real difference in the world; they make many valuable contributions to civilisation including: increasing awareness about climate change and its effects, observing geohazards and forecasting earthquakes and volcanic eruptions, dealing with groundwater and finding solutions to pollution-free water, studying the strength of bedrock and working to support dams, tunnels, roads, and power stations. If you are pursuing a career in any of the fields below, then this course is highly recommended:

- Geologist
- Paleontologist
- Seismologist
- Meteorologist
- Volcanologist
- Hydrologist
- Oceanographer
- Environmental Consultant
- Geochemist
- Hydrologist



## **Course Title: Organic Chemistry**

**Length-Credit: 1 Semester / 0.5Credit**

**Grade Eligibility: Grades 12**

### **Prerequisites:**

General Chemistry (Grade 10 Chemistry)

### **Course Description:**

The major aim of this course is to introduce students to the foundations of organic chemistry by focusing on the structures, properties and chemical reactivity of the various hybridization states carbon atoms can adopt in alkanes (including cycloalkanes), alkenes and alkynes. This course will also cover different aspects of isomerism observed in organic compounds as well as the reactions' mechanisms (substitution, elimination, and addition) in terms of the electrons flow. This course will also introduce various analytical techniques (MS, NMR and IR) used to determine organic structures.

### **Purpose:**

This course is designed to provide a fundamental overview of organic chemistry to students interested in pursuing a career in the sciences. Upon successful completion of this class, students will understand the relationship between structure and function of molecules, the major classes of reactions, reaction energetics and mechanisms, synthesis of organic compounds, and how to determine structure via various spectroscopic techniques. Several themes are prevalent in each unit of study: nomenclature, chemical and physical properties, structures, mechanisms, common molecules, and the diversity of organic molecules in plants, bacteria, and animals. This course will have an extensive focus on laboratory experience and application of these concepts. Students will be challenged to consider how these concepts are related to the broader applications of science and think critically about how they could apply these applications in the laboratory setting. Students intending a career in chemistry, nursing, medicine, dentistry, pharmacy, medical technology, science laboratory work or related sciences should take this class.

### **Skills you will acquire:**

- Apply information on bonding and structures of alkanes, alkenes and alkynes
- Understand and recognize various types of isomerism present in the main three groups of hydrocarbon
- Recognize different organic reactions (substitution, elimination, and addition) and to show a bond breaking/forming using curly arrows representation of the electrons flow
- Investigate simple spectroscopic data to identify structures of organic molecules



## **Course Title: Biochemistry**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: 12**

**Prerequisites: Grade 10 Chemistry and Grade 9 Biology**

### **Course Description:**

This course provides you with a grounding in the basic principles of Biochemistry. It aims to provide an understanding of the basic chemical properties of molecules that make life possible and a description of the key components of the cell and their biochemical interactions. You will learn about the processes that allow energy to be harvested from sunlight, converted and stored in food and released to drive biochemical reactions within cells.

### **Purpose:**

To provide grounding in the basic principles of Biochemistry for students in Biological Sciences. To provide a description of the principal components of cells. To demonstrate how energy is harvested from sunlight, converted and stored in food and then released into high-energy compounds capable of driving biochemical reactions. Students intending a career in chemistry, nursing, medicine, dentistry, pharmacy, medical technology, science laboratory work or related sciences should take this class.

### **Skills you will acquire:**

To understand basic chemical properties of molecules that make life possible, and how these properties relate to specific macromolecular structures and functions. Proteins, carbohydrates, nucleic acids, lipids and biological membranes will be understood. The mode of action of enzymes and macromolecular complexes as protein machines will be investigated. An introduction to biochemical and biophysical methods will be given. The functions of mitochondria and chloroplasts in oxidative phosphorylation and photosynthesis respectively will be discussed, as well as how energy can be released during catabolism and how it can be stored during anabolism.



## **Course Title: Genetics**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 12**

**Prerequisites: No prerequisite**

### **Course Description:**

This course introduces students to the fundamental principles of genetics, including the structure and function of DNA, genetic inheritance, and gene expression. Students will learn about the relationship between genes and traits, as well as the mechanisms of genetic variation and evolution. The course will also cover the ethical, legal, and social implications of genetic research and genetic testing. Through laboratory experiences and hands-on activities, students will develop skills in genetic analysis, data interpretation, and scientific inquiry. The course aligns with the Next Generation Science Standards (NGSS) for high school genetics. It also provides in-depth exploration of the principles and techniques of genetic engineering, including genetic modification, gene editing, and gene therapy. Students will learn about the tools and technologies used in genetic engineering, such as recombinant DNA technology. The course will cover the applications of genetic engineering in biotechnology, medicine, agriculture, and environmental science. Additionally, the course will help students develop an appreciation for the significance of genetics in society, as well as the impact of genetics on human health and the environment.

### **Purpose:**

This is a college preparatory course which aims to provide students with a foundation of knowledge that will prepare them for further study and careers related to genetics, molecular biology, biotechnology, and related fields. By gaining an understanding of genetics, students will be better equipped to pursue careers in genetic counseling, medical genetics, genetic engineering, biotechnology, pharmaceuticals, and biomedical research.

### **Skills you will acquire:**

Upon completion of this course, students will be able to:

- Construct an explanation based on evidence for how the structure of DNA determines the structure of proteins, which carry out the essential functions of life through systems of specialized cells.
- Ask questions to clarify relationships about the role of DNA and chromosomes in coding the instructions for characteristic traits passed from parents to offspring.
- Describe the structure and function of DNA and the role of genes in genetic inheritance.
- Explain the different patterns of genetic inheritance, including dominant and recessive traits.
- Analyze the impact of environmental factors on gene expression and the development of genetic disorders.
- Evaluate the ethical implications of genetic research and genetic engineering.
- Use laboratory techniques to study genetics, including DNA extraction, gel electrophoresis, and PCR.
- Develop critical thinking and problem-solving skills used in genetic research and analysis.

## **Course Title: Human Anatomy**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 12**

**Prerequisites: No prerequisite**

### **Course Description:**

In this course, students will explore the structure and function of the human body, from cells to organ systems. It covers the major systems of the body, such as the skeletal, muscular, nervous, cardiovascular, respiratory, digestive, urinary, and reproductive systems, working together to maintain homeostasis. It also includes how environmental factors, such as diet, exercise, and stress, can impact human health. Through hands-on activities and laboratory experiences, students will develop an understanding of anatomical terminology, laboratory techniques, and critical thinking skills used in the study of human anatomy. This course aims to prepare students for further study in health-related fields and biomedical sciences, as well as to develop an appreciation for the complexity of the human body.

### **Purpose:**

This is a college preparatory course which aims to equip students with the foundational knowledge and skills needed to pursue a wide range of careers related to human anatomy. By gaining a thorough understanding of the structure and function of the human body, students will be better equipped to pursue many health-related careers. If you are pursuing a career in any of the fields below, then this course is highly recommended to join: physician, nurse, physical therapist, occupational therapist, chiropractor, biomedical researcher, sports medicine physician, radiologic technologist, anesthesiologist, pathologist, neurologist, cardiologist, surgeon, medical illustrator, biomechanist, kinesiologist, exercise physiologist, forensic pathologist, embryologist, and histologist.

### **Skills you will acquire:**

- Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
- Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
- Use a model to illustrate the role of cellular division and differentiation in producing and maintaining complex organisms.
- Describe the basic anatomical structures and functions of the human body.
- Explain the relationship between structure and function in the major organ systems.
- Identify the interdependence of the organ systems.
- Apply anatomical knowledge to real-life situations.
- Analyze the impact of environmental factors on human health, such as diet, exercise, and stress, based on anatomical knowledge.
- Evaluate the relationship between anatomical structure and disease, and discuss how knowledge of anatomy can aid in diagnosis and treatment.
- Use anatomical terminology to communicate effectively with healthcare professionals and peers.
- Apply critical thinking skills to interpret and analyze scientific literature related to human anatomy.



## **Course Title: Health and Science**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grade 12**

**Prerequisites: Grade 9 Biology and Grade 10 Chemistry**

### **Course Description and Purpose:**

Physical and mental health are usually overlooked with respect to course focus in the science department. Thus, we want to introduce a course that focuses on the ideal health standards of life and energy requirements of the body. This course aims to improve our students ability to make informed decisions on their dietary and life choices. They will gain a breadth of knowledge and skills necessary to communicate ideal healthy life choices that are well based from scientific disciplinary core ideas.

### **Skills you will acquire:**

- Organizational skills
- Study Skills
- Critical thinking skills
- Analytical writing skills
- Data analysis
- Laboratory Skills



## **Course Title: Forensic Science**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9, 10, 12 (Units Differ)**

### **Prerequisites:**

Completion of both Biology and Chemistry-based courses prior to start of course.

### **Course Description:**

Forensic Science is a laboratory-based course in which students will apply their prior knowledge of biology, chemistry, physics and mathematics to the popular field of crime scene investigation. Students will use a structured and scientific approach to the investigation of crime of assault, abuse and neglect, domestic violence, accidental death, homicide, and the psychology of criminal behavior. Students will learn terminology and investigate procedures related to crime scene, questioning, interviewing, criminal behavior characteristics, truth detection, and scientific procedures used to solve crimes. Using scientific methods, students will collect and analyze evidence through case studies and simulated crime scenes such as fingerprint analysis, ballistics, and blood splatter analysis. Students will learn the history, legal aspects, and career options for forensic science.

### **Purpose**

For prospective science majors, this course provides a solid foundation for higher-level science courses in highschool. For students interested in the physical sciences, this course provides the opportunity to study how the principles of Biology & Chemistry are applied to living systems. For students NOT interested in pursuing a collegiate science degree, this course provides an excellent opportunity to earn college credit to satisfy your degree programs' mandatory science requirement. Assuming you maintain a high level of interest and enthusiasm throughout the year, you should find the course stimulating and fun

### **Skills You Will Acquire**

- Organizational skills
- Study Skills
- Critical thinking skills
- Analytical writing skills
- Data analysis
- Laboratory Skills





## **Course Title: Introduction to Sustainable Development**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9 and 10**

**Prerequisites: No prerequisite**

### **Course Description:**

The sustainable development course revolves around tackling environmental problems that focus on energy consumption, resource depletion and support for our ever increasing human population. We are forced to explore areas and solutions that would solve these issues as human impact on the environment is increasingly becoming more detrimental to earth's ecosystems.

Topics include:

- 1- Renewable and Non-Renewable Energy Resources
- 2- Human Impact on the Environment
- 3- Engineering and design standards (ETS) to solve environmental problems
- 4- Ecology
- 5- Recycle, Reuse and Reduce methodologies and innovations

### **Purpose**

For prospective science majors, this course provides a solid foundation for higher-level science courses in highschool. For students interested in pursuing careers revolving around forensic sciences (Dubai Police)For students NOT interested in pursuing a collegiate science degree, this course provides an excellent opportunity to earn college credit to satisfy your degree programs' mandatory science requirement. Assuming you maintain a high level of interest and enthusiasm throughout the year, you should find the course stimulating and fun.

### **Skills you will acquire**

- Organizational skills
- Study Skills
- Critical thinking skills
- Analytical writing skills
- Data analysis
- Laboratory Skills



## **Math Elective Courses**

- 1. Calculus**
- 2. Statistics**
- 3. AP Calculus**
- 4. Business Math**
- 5. College and Career Readiness (SAT, EmSAT)**
- 6. Pre-Calculus**



## **Course Title: Calculus**

**Length-Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 12**

**Prerequisites: Algebra I and Algebra II**

### **Course Description:**

Students are expected to use their mathematical knowledge and practices to solve problems. This course strengthens students' understanding of functions in preparation for the process of differentiation and integration. Calculus concepts explored include limits and continuity, derivatives, definite integrals, exponential and logarithmic functions, trigonometric functions, and techniques of integration. Emphasis is placed on the exploration of real-world calculus applications. Students are expected to learn to choose and use appropriate mathematics and statistics to analyze empirical situations, to understand them better, and to improve decisions. Students are expected to complete 4 open responses and 4 core assignments. Curriculum for this course requires 2-3 hours a week of independent practice such as homework, reading and projects.

### **Purpose:**

The skills acquired as part of the Calculus course will further support careers and further studies in Engineering, Economics, Medicine, Cybersecurity, Artificial intelligence. Calculus is the basis of all higher mathematics and it helps us to understand why the world is the way it is.

### **Skills you will acquire:**

Unit 1: Derivatives

Limits, including limits involving infinity end behavior, including diagonal asymptotes, Continuity, both pictorially and algebraically, Definition of the Derivative Power, Product and Quotient Rules, Implicit Differentiation, Chain Rule

Unit 2: Derivatives cont.

Tangent Lines, Maxima and Minima Related Rates of Change, Indeterminate Form and Hospital's Rule, Derivative of Log Functions, Derivative of Exponential Functions

Unit 3: Integration

Indefinite Integrals, Constant of Integration, Substitution Method, Area Under a Curve, Definite Integrals Fundamental Theorem of Calculus Substitution in Definite Integrals, Areas between Curves.

## **Course Title: Statistics**

**Length/ Credit: 1 Year / Credit 1.0**

**Grade Eligibility: Grade 12**

**Prerequisites: Algebra I**

### **Course Description:**

This course is designed to provide a basic understanding of descriptive and inferential statistics. Topics include the measures of central tendency, standard deviation, combinations and permutations, probability, sampling, and various distributions. Emphasis is on applications of statistical concepts.

### **Purpose:**

Students of statistics develop the skill set required to judge whether the conclusions drawn from data are accurate. Students become informed, critical users of data. They can apply such skills in their everyday lives and future career.

### **Skills you will acquire:**

This course covers the following probability and statistics concepts:

#### 1-Interpreting Categorical and Quantitative Data

- Summarize, represent, and interpret data on a single count or measurement variable.
- Summarize, represent, and interpret data on two categorical and quantitative variables. Interpret linear models.

#### 2-Making inferences and Justifying Conclusions

- Understand and evaluate random processes underlying statistical experiments.
- Make inferences and justify conclusions from sample surveys, experiments and observational studies.

#### 3-Conditional Probability and the Rules of Probability

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

#### 4-Using Probability to Make Decisions

- Calculate expected values and use them to solve problems.
- Use probability to evaluate outcomes of decisions.



## Course Title: AP Calculus

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 12**

**Prerequisites:** This is an advanced course and students should have a strong mathematical background.

### **Course Description:**

AP Calculus AB is an introductory college-level calculus course. Students cultivate their understanding of differential and integral calculus through engaging with real-world problems represented graphically, numerically, analytically, and verbally and using definitions and theorems to build arguments and justify conclusions as they explore concepts like change, limits, and the analysis of functions.

Within this course, students are led through the historical journey of the discovery and development of calculus. Each lesson involves interactive videos that allow students to go at their own speed, with the ability to pause and rewind at any point. With student-friendly note packages and practice questions with detailed solutions, students will never get stuck and can learn how to solve even the most challenging calculus problems. Students can also retake every quiz and test, which are randomized, to encourage them to strive towards mastery.

### **Purpose:**

The study of limits, derivatives, definite and indefinite integrals, and the Fundamental Theorem of Calculus

### **Skills you will acquire:**

The AP Calculus AB framework included in the course and exam description outlines distinct skills, called Mathematical Practices, that students should practice throughout the year—skills that will help them learn to think and act like mathematicians.

Skill	Description
1. Implementing Mathematical Processes	Determine expressions and values using mathematical processes.
2. Connecting Representations	Translate mathematical information from a single representation.
3. Justification	Justify reasoning and solutions.
4. Communication and Notation	Use correct notation, language, and mathematical conventions.

## **Course Title: Business Math**

**Length-Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 12**

**Prerequisites: Algebra I**

### **Course Description:**

The course includes a review of the fundamental mathematics operations using decimals, fractions, percent, ratio and proportion; mathematics concepts and skills in buying and selling, computing gross and net earnings, overtime and business data presentation, analysis and interpretation.

### **Purpose:**

Business mathematics is used by commercial companies to record and manage business works. Commercial businesses use math in departments of accounting, inventory management, marketing, sales forecasting and financial analysis.

### **Skills you will acquire:**

- Reinforcement of mathematical computations.
- Challenge the student to understand how to process and interpret information to arrive at logical conclusions to common business math applications.
- Develop proficiency in the application to solve business math problems.
- Understand the important role math plays in all facets of the business world.



## **Course Title: College and Career Readiness (SAT, EmSAT)**

**Length-Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: Algebra and Geometry**

### **Course Description:**

Test preparation courses give high schoolers the opportunity to perform better on tests, which can help in getting admitted to the college they desire. For pre-graduate students in any field, a good score on a standardized test helps get them into a graduate program and can lead to grants, fellowships and scholarships.

### **Purpose**

Preparation involves all the preliminary steps to getting ready for the test. It is important to practice the types of questions asked on the SAT/EmSAT tests and to learn how to avoid the most common mistakes.

### **Skills you will acquire:**

- Improve subject skills.
- Fill in any gaps in understanding the concepts.
- Improve test scores and prepare more effectively for exams.
- Understand mathematical concepts
- Increase procedural skill and fluency in math, and ability to apply those concepts and skills to real-world problems



## **Course Title: Pre-Calculus**

**Length-Credit: 1 Year / Credit 1.0 Credit**

**Grade Eligibility: Grade 11**

**Prerequisites: Algebra 1 (Grade 9) & Geometry (Grade 10)**

### **Course Description:**

Pre-calculus is a branch of mathematics which prepares students for the study of calculus. Calculus is a higher-level branch of mathematics that deals with the study of rates of change and the accumulation of quantities.

Precalculus typically includes topics such as algebra, trigonometry, geometry, functions, limits, and vectors, among others. In Pre-calculus, students learn about functions and their properties, including graphing functions, analyzing their behavior, and understanding their algebraic properties. Trigonometry is also an important part of precalculus, as it provides a foundation for understanding the relationships between angles and the sides of a triangle.

### **Purpose:**

Pre-calculus is an important subject for students who plan to pursue a degree in a STEM (science, technology, engineering, and mathematics) field or any other field that requires a strong foundation in mathematics.

### **Skills you will acquire:**

- Understanding of functions: Students should be able to understand the concept of a function and be able to represent functions algebraically, graphically, and numerically. They should also be able to evaluate, compose, and decompose functions.
- Mastery of algebraic skills: Pre-calculus builds on algebraic concepts and skills learned in earlier math courses. Students should be able to manipulate and solve equations, factor polynomials, and simplify expressions.
- Knowledge of trigonometry: Students should have a thorough understanding of trigonometric functions and their properties, including the relationships between angles and sides of triangles, and be able to solve trigonometric equations.
- Understanding of limits: Students should be able to understand the concept of a limit, and use it to evaluate limits numerically, graphically, and algebraically. They should also be able to identify vertical and horizontal asymptotes of functions.
- Familiarity with vectors: Students should have a basic understanding of vectors, including their properties and how to perform basic operations with them.
- Competence with graphing: Students should be able to graph functions, including their transformations, and be able to analyze the behavior of functions from their graphs.





## **IT Elective Courses**

- 1. Web and Graphic Design**
- 2. Application Design**
- 3. Python Programing Language**
- 4. Multimedia (Photoshop and Video Editing)**
- 5. Networking, Programing (C++) and Database (Emsat Requirement)**



## **Course Title: Web and Graphic Design**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9 and 10**

**Prerequisites: No prerequisite**

### **Course Description:**

This course is designed to provide you with a comprehensive introduction to web design, including the basics of HTML, CSS, and JavaScript. You will learn how to create web pages using HTML and style them using CSS, as well as how to add dynamic functionality using JavaScript.

### **Purpose:**

Throughout this course, you will learn:

- The fundamentals of HTML, including document structure, tags, and attributes
- The basics of CSS, including selectors, properties, and values, as well as how to create layouts and styles for your web pages
- The basics of JavaScript, including variables, data types, functions, and objects, as well as how to use JavaScript to add interactivity and dynamic functionality to your web pages
- Best practices for web design, including accessibility, usability, and search engine optimization (SEO)

### **Skills you will acquire:**

By the end of this course, you will have the skills and knowledge necessary to design and create your own web pages using HTML, CSS, and JavaScript, and you will have a strong foundation for further study in web development.

Whether you are new to web design or have some experience with HTML, CSS, and JavaScript, this course will provide you with a solid foundation and help you develop the skills you need to create engaging and effective web pages.



## **Course Title: Application Design**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9 and 10**

**11 and 12 (Boys Only) and it will be advanced**

**Prerequisites: No prerequisite**

### **Course Description:**

This course is designed to provide you with a comprehensive introduction to Application design using MIT App Inventor. You will learn how to create web applications using MIT App Inventor, a visual programming environment that allows you to create mobile apps for devices using a simple drag-and-drop interface.

### **Purpose:**

Throughout this course, you will learn:

- The basics of MIT App Inventor, including the user interface, components, and blocks
- How to create web applications using MIT App Inventor, including how to add buttons, labels, text boxes, and other components
- How to add functionality to your web applications using blocks, including how to handle events, manipulate data, and interact with web services
- Best practices for designing effective and user-friendly web applications

### **Skills you will acquire:**

By the end of this course, you will have the skills and knowledge necessary to design and create your own web applications using MIT App Inventor, and you will have a strong foundation for further study in web development. Whether you are new to web design or have some experience with programming, this course will provide you with a solid foundation and help you develop the skills you need to create engaging and effective web applications.



## **Course Title: Python Programming Language**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

This course is designed to provide you with a comprehensive introduction to programming using Python. Python is a powerful, easy-to-learn programming language that is widely used in many fields, including data science, web development, and scientific computing.

### **Purpose:**

Throughout this course, you will learn:

- The fundamentals of programming, including variables, data types, control structures, functions, and object-oriented programming (OOP) concepts
- The basics of Python syntax and the Python standard library, including how to use built-in functions, modules, and libraries to solve problems
- How to write and test Python programs, including how to use an integrated development environment (IDE) to write and debug your code

### **Skills you will acquire:**

By the end of this course, you will have the skills and knowledge necessary to write Python programs to solve a wide range of problems, and you will have a strong foundation for further study in programming.

Whether you are new to programming or have some experience with other programming languages, this course will provide you with a solid foundation and help you develop the skills you need to become a proficient Python programmer.



## **Course Title: Multimedia (Photoshop and Video Editing)**

**Length-Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

This course is designed to provide you with a comprehensive introduction to two important areas of digital media production: Photoshop and video editing. In this course, you will learn how to create and edit images and videos using Adobe Photoshop and Adobe Premiere Pro, two of the most popular digital media tools in the industry.

### **Purpose:**

Throughout this course, you will learn:

- The fundamentals of image editing using Adobe Photoshop, including how to use layers, masks, and filters to create and edit images.
- How to manipulate images in Photoshop to remove blemishes, adjust color and contrast, and create composite images.
- The basics of video editing using Adobe Premiere Pro, including how to import, edit, and export video footage.
- How to add audio, special effects, and transitions to your videos to create professional-quality results.
- Best practices for digital media production, including file management, project organization, and workflow optimization.

### **Skills you will acquire:**

By the end of this course, you will have the skills and knowledge necessary to create and edit both images and videos using Adobe Photoshop and Adobe Premiere Pro, and you will have a strong foundation for further study in digital media production.

Whether you are new to digital media production or have some experience with image and video editing, this course will provide you with a solid foundation and help you develop the skills you need to create compelling and professional-quality digital media projects.



## **Course Title: Networking, Programming (C++) and Database (Emsat Requirement)**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description**

This course is designed to provide you with a comprehensive introduction to the basics of computer networking, programming using C++, and Introduction to Database. Basically the course will cover the Emsat Requirements. In this course, you will learn how computers communicate with each other over networks, and the fundamentals of network protocols, addressing, and routing.

Then moving forward into an introduction to programming using C++, one of the most popular programming languages in the world. C++ is a powerful, general-

### **Purpose**

Throughout this course, you will learn:

- The basics of computer networking, including network protocols, addressing, and routing
- The basics of network architecture, including client-server and peer-to-peer architectures
- The basics of network security, including authentication, encryption, and firewalls
- The fundamentals of programming, including variables, data types, control structures, functions, and object-oriented programming (OOP) concepts
- The basics of C++ syntax and the C++ standard library, including how to use built-in functions, classes, and templates to solve problems
- How to write and test C++ programs, including how to use an integrated development environment (IDE) to write and debug your code
- Creating and managing databases including (tables, queries, forms and reports)

### **Skills you will acquire:**

By the end of this course, you will have a solid understanding of the fundamentals of computer networking, and you will have a strong foundation for further study in networking and related fields, and you will have the skills and knowledge necessary to write C++ programs to solve a wide range of problems, and you will have a strong foundation for further study in programming.



## Art Elective Courses

1. Introduction to Art
2. Drawing and Crafting
3. Painting and Design
4. Architectural Design
5. Digital Art Adobe Illustrator



## **Course Title: Introduction to Art**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grades 9 and 10**

**Prerequisites: No prerequisites**

### **Course Description:**

Students will explore elements of art through the works of historical and contemporary artists. They will examine the relationship between elements of art and feelings. Students will choose between creating original art or curating a presentation to express a feeling with lines, shapes, rhythm, colors, and/or patterns. **Drive**

### **Purpose:**

Identify and describe elements of art. Infer the mood or feelings of an art piece.

Respond to art. Create original art with lines, shapes, rhythm, colors, and/or patterns conveying a feeling.

Curate a presentation of visual art examples, demonstrating elements of art and the feeling the artist conveyed. Present works of art or presentations to an audience.

### **Skills you will acquire:**

The elements of art are components or parts of a work of art that can be isolated and defined. They are the building blocks used to create a work of art. Students who can identify the elements and evaluate their role in the composition of a work of art will be better able to understand an artist's choices.





## **Course Title: Drawing and Crafting**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9,10,11,12**

**Prerequisites: No prerequisites**

### **Course Description:**

The focus of this course is to consider and explore the proposition that the act of drawing can be used as an expressive and creative tool to rationalize the world through an artistic pathway. This notion is an artistic pathway. It is introduced and developed by practical investigations of some basic drawing skills and techniques used in art. This enables students to show both the depth and breadth of their conceptual and technical abilities to conceive, develop and present an original project in their area of study. The student visually translates that understanding and information into final visual form within the professional parameters of the student's program.

### **Purpose:**

Art and craft activities give students a sense of achievement and allow them to take pride in their work which builds confidence. Making art is a great, safe way to discover that it's okay to make mistakes and that getting things 'wrong' can lead you to a whole new idea. **Students** get to try new things and also develop their "self-regulation skills" (e.g. when waiting for paint or glue to dry). This helps them develop patience.

### **Skills you will acquire:**

- Explore, challenge, develop, and express ideas using the skills, language, techniques, and processes of the arts.
- Create and/or present, collaboratively and independently, expressive products in the arts for a range of audiences and purposes.
- Understand and Connect Contexts of Time, Place, and Community
- Demonstrate critical awareness of and value the role of the arts in creating and reflecting culture.
- Respect the contributions of individuals and cultural groups to the arts in local and global contexts and value the arts as a record of human experience and expression.
- Examine the relationship among the arts, societies, and environments.
- Apply critical thinking and problem solving strategies to reflect on and respond to their own and others' expressive work.
- Understand the role of technologies in creating and responding to expressive works.
- Analyze the relationship between artistic intent and expressive work.

## **Course Title: Painting and Design**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 9 and 10**



**Prerequisites: No prerequisites**

**Course Description:**

Through a wide range of experiences, students learn about painting tools, basic color-mixing, composition, form, and spatial relationships. Students also engage with a variety of subjects ranging from still-life, interiors, abstraction, self-portraits and the figure.

**Purpose:**

This course will provide a foundation in visual arts concepts with an emphasis on: cultivation of creativity and the art-making process. self-discovery: developing the student's individual and unique artistic talent. the elements of art and principles of design.

**Skills you will acquire:**

develop hand, eye, arm and body coordination ,develop finger and hand muscles.  
use shape, form and colour to express themselves in ways they do not have words for yet.  
experiment with colour and texture.



## **Course Title: Architectural design**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisites**

### **Course Description:**

Students will learn the application of the artistic processes and skills for graphic designers, interior designers, and architects. Students will learn the basics of line, contour, shading, texture, perspective, composition, and action drawing.

### **Purpose:**

This course will provide a foundation in visual arts concepts with an emphasis on: cultivation of creativity and the art-making process. self-discovery: developing the student's individual and unique artistic talent. the elements of art and principles of design.

### **Skills you will acquire:**

develop hand, eye, arm and body coordination ,develop finger and hand muscles.  
use shape, form and colour to express themselves in ways they do not have words for yet.  
experiment with colour and texture.



## **Course Title: Digital Art Adobe Illustrator**

**Length/Credit: 1 Year/ 1.0 Credit**

**Grade Eligibility: Grade 12**

**Prerequisites: No prerequisites**

### **Course Description:**

Digital design requires effective communication skills and the ability to plan and execute a project. Thus, writing and production classes are required. In addition, students are expected to enhance their art and media knowledge while developing critical thinking skills.

### **Purpose:**

Perspective in art usually refers to the representation of three-dimensional objects or spaces in two dimensional artworks. Artists use perspective techniques to create a realistic impression of depth, 'play with' perspective to present dramatic or disorientating images.

### **Skills you will acquire:**

- Understanding Adobe Illustrator.
- Selecting and Aligning objects.
- Using Shapes to Create Artwork for a Postcard.
- Transforming Objects.
- Creating an Illustration with the Drawing Tools.
- Using Color and Patterns to Enhance Signage.
- Adding Type to a Poster.
- Organizing Your Artwork with Layers.



## **Humanities Elective Courses**

- 1. Business Enterprise and Entrepreneurship**
- 2. Marketing and Advertising**
- 3. Personal Finance**
- 4. United Nations**
- 5. Economics**
- 6. Business Management**
- 7. Digital Marketing and Media**
- 8. Accounting**
- 9. Economic Geography ( جغرافيا اقتصادية )**



## **Course Title: Business Enterprise and Entrepreneurship**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grades 9 and 10**

**Prerequisites: No prerequisite**

### **Course Description:**

This course is a year long elective taken in semester one and two which will provide students with an introduction into the world of business and work. Concepts that will be explored throughout this course include - how people become successful entrepreneurs, how businesses are formed and become profitable, skills needed to work in business, how to market products/services and much more! The course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

**Purpose:** As business surrounds us every day, this elective would benefit students that wish to learn about the world of business in more detail, aspire to become successful entrepreneurs or wish to join the workforce in the future!

### **Skills you will acquire:**

By the end of this elective course students will be equipped with the basic knowledge and skills used in the modern day world of business with particular emphasis on how to be a successful entrepreneur in a competitive market.



## **Course Title: Marketing and Advertising**

**Length/ Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grade 9 & 10**

**Prerequisites: No prerequisite**

### **Course Description:**

This elective course is a semester one course designed to introduce students to the world of marketing/advertising within the world of business. Students will explore the principles of marketing and advertising and the strategies used by the most successful businesses in the world and most importantly the students will then apply this knowledge and develop their skills further by marketing their own products and services. This course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

### **Purpose:**

The purpose of this elective course is to provide students with a basic understanding of business and marketing within the world of business in order to become socially aware of marketing strategies.

### **Skills you will acquire:**

By the end of this elective students will be equipped with the basic marketing knowledge and skills used in the fast paced world of business that will enable them to be socially aware and equip them with skills required to join the workforce in the future.



## **Course Title: Personal Finance**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grade 9 and 10**

**Prerequisites: No prerequisite**

### **Course Description:**

This elective course is designed to provide students with an introduction to personal finance including the basics on what it means to be financially responsible in today's world. The semester-long course will provide students with the opportunity to explore many topics within personal finance such as income and expenditure, saving, investing and much more in order to provide them with the knowledge and skills necessary to survive and become successful in today's ever changing market and workforce. This course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

### **Purpose:**

The purpose of this elective course is to provide students with the basic knowledge and understanding of personal finance and to equip them with the skills in order to become financially responsible members of society both now and in the future.

### **Skills you will acquire:**

By the end of this elective students will be equipped with the knowledge and skills needed to manage personal income, expenditure, saving and investing in the current economic climate.





## **Course Title: United Nations**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

The United Nations elective course is designed to analyze the world differently while respecting global geopolitical perspectives. It directs students' attention to global challenges that mandate the United Nations to help their world become a safer home for humankind. This elective course allows students the opportunity to understand the nature and breadth and depth of the global issues. This course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

### **Purpose:**

The purpose of this elective course is to provide students with the skills and knowledge to analyze the world from a different perspective and to provide them with the opportunity to become more socially responsible and well rounded citizens both now and in the future.

### **Skills you will acquire:**

By the end of this elective course students will look at the world from a different perspective and will have a new found understanding of social responsibility and how they as individuals can make the world a better and safer place.



## **Course Title: Economics**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

The economics/accounting elective will be a year long elective taken by students to introduce them to the fundamentals of economics. Throughout this course students will explore how economies and markets function, the role of the government in decision making, how trade affects the global economy and much more! The assessment for this course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

### **Purpose:**

This elective is perfect for students that have an interest in working in a government or business/financial sector in the future but also for students who wish to understand the economy we are living and working in in more detail and acquire skills that will benefit their personal and professional life in the future.

### **Skills you will acquire:**

By the end of this elective course students will have a deeper understanding and awareness of how economies are efficiently run, the role of decision making within the economy and an overall sense of how economies interact across the globe in order to provide the goods and services needed for consumers.



## **Course Title: Business Management**

**Length/Credit: 1 Year / 1.0 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

This elective course focuses on business administration and management. The year-long course will provide students with an understanding of the basic theories and principles by which businesses are organized and managed in modern society. They will demonstrate competency by analyzing management functions, principles, and processes that contribute to the achievement of organizational goals. The assessment for this course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

### **Purpose:**

The purpose of this elective course is to provide students with the knowledge and skills that they can use in the future to manage and organise a business or similarly to become a member of the vastly changing workforce.

### **Skills you will acquire:**

By the end of this elective course students will have a deeper understanding on how successful businesses are run and how to implement theories and principles in modern society in order to achieve success and manage a business in the most efficient manner.



## **Course Title: Digital Marketing and Media**

**Length/Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

**Course Description:** This elective course focuses on the modern day world of digital marketing and media. The course will explore many topics and real life examples of digital and social media marketing strategies, implications and outcomes. The assessment for this course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

**Purpose:** To expose students to the strategies and activities used by businesses in the modern day to connect with the target market. To analyze and apply these skills via real life examples and tasks.

### **Skills you will acquire:**

By the end of this elective course students will be equipped with the knowledge and skills required to be a part of the world of digital marketing and media both from a perspective of consumers and businesses.



## **Course Title: Accounting**

**Length/ Credit: 1 Semester / 0.5 Credit**

**Grade Eligibility: Grades 11 and 12**

**Prerequisites: No prerequisite**

### **Course Description:**

During this semester two elective students will receive an introduction to accounting concepts, including how to track income, how to prepare financial accounts and different strategies and systems used for decision making within a business environment. The assessment for this course will include multiple forms of assessment including projects, research tasks, examinations and practical assessments.

### **Purpose:**

This elective is perfect for students that have an interest in working in a government or business/financial sector in the future but also for students who wish to understand the economy we are living and working in in more detail and learn skills that will benefit their personal and professional life in the future.

### **Skills you will acquire:**

By the end of this elective students will be equipped with basic accounting knowledge and skills needed to manage their own personal income and expenditure while also providing them with the basic accounting knowledge and skills used by accountants across the world in line with the generally accepted accounting principles.



## اسم المساق: جغرافيا اقتصادية

لغة تدريس المساق: اللغة العربية

مدة المساق/الساعات المعتمدة: سنة دراسية-1 ساعة أكاديمية معتمدة

الصفوف : الصف الحادي والثاني عشر (قسم البنات فقط)

متطلبات: لا يوجد

وصف المساق :

مشاركة الطلبة في فهم وتفسير الظواهر والأنشطة الاقتصادية في الحيز المكاني والزمني وفتح الآفاق أمامهم لتعميق مفاهيمهم لإجراء البحوث وتطبيقها في المجالين العلمي والأكاديمي. لذا فإنه يتوقع من الطالب فهم العوامل المشكلة لاقتصاديات المنطقة وكيفية تفاعلها وما ينجم عنها من تباين.

يتطلب هذا المساق زيارة ميدانية للتجمعات الصناعية في دولة الإمارات والمدن الصناعية للتعرف على هيكلها الاقتصادي ونظام الإنتاج فيها.

أهداف المساق:

- تعريف الطالب بمفهوم الجغرافيا الاقتصادية.
- تعريف الطالب بمدارس الجغرافيا الاقتصادية.
- تعريف الطالب بالتغيرات التي طرأت على الجغرافيا الاقتصادية.
- تعريف الطالب بحلقات ومحتوى الجغرافيا الاقتصادية ( حلقة الانتاج، والتبادل والاستهلاك).
- تمكين الطالب من تفسير الأنشطة الاقتصادية من خلال النظريات والنماذج.

مهارات ومخرجات التعلم:

يتوقع من الطالب بعد الانتهاء من دراسة هذا المساق أن يكون قادرا على :

- التمييز بين الجغرافيا الاقتصادية وعلم الاقتصاد.
- تمييز وتفسير مواقع الأنشطة الاقتصادية وفقاً للنظريات والنماذج.
- تمييز التغيرات الحديثة التي طرأت على حلقات ومحتوى الجغرافيا الاقتصادية.
- محاكاة النماذج والنظريات العالمية مع الواقع الإماراتي.

## Physical Education Elective Courses

### **Course Title: Physical and Health Education**

**Credit/Length: 1 Year / 1.0 Credit**

**Grade Eligibility: Grade 12 Boys only**

**Prerequisites: No prerequisite**

#### **Course Description:**

The Grade 12 PHE Elective is a new course that comprises theoretical and practical elements of physical education. Students will learn about the anatomy of the human body, physiological and psychological preparation for sporting events, health-related fitness components, fitness testing, diet and nutrition. Some of these topics contain strong cross-curricular links with science and biology. Students will also learn about the principles of training when designing a gym programme, the role of the coach/official, safe practice in sport and the importance of business and sponsorship in sport. The practical element of the course allows students to participate in a performance assessment video where they choose a sport they exhibit excellence in.

#### **Purpose:**

To educate students on the importance of exercise for physical and mental health, give them lifelong skills for understanding diet, nutrition and principles of exercise.

#### **Skills you will acquire:**

- The objectives of Grade 12 PHE are to develop the learner's performance in physical activity
- ability to reflect on performance in physical activity
- develop learner's knowledge and understanding of the factors which influence performance and participation in physical activity
- appreciation of the benefits of physical activity for lifelong health and wellbeing
- capacity to undertake different roles in physical activities
- understanding of the principles underlying ethical participation in physical activity

