



Bellaire High School Elective Course Descriptions

Communication

Communication Application (1 Semester) Students will identify, analyze, develop, and evaluate communications skills needed for professional and social success in interpersonal situations, group interaction and personal and professional presentations

Professional communication (1 Semester) Blends written, oral, and graphic communications in a career-based environment. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

Social Studies

***AP Art History (11th/12th only)** Students examine major forms of artistic expression from the past and present and from a variety of cultures. They learn to look at works of art critically, with intelligence and sensitivity, and to articulate what they see or experience.

***AP European History (11th/12th only)** The study of European history since 1450 introduces students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live.

***AP Human Geography (11th/12th only)** The study of patterns and processes that have shaped human understanding, use, and alteration of the Earth's surface. Students study population, cultural patterns and processes, political organization of space, agricultural and rural land use, industrialization and economic development, and cities and urban land use.

***AP Micro Economics (12th only)** Principles of economics from the perspective of individual decision-makers, both consumers and producers. Particular emphasis is placed on supply and demand, resource allocation, prices, cost and profit, the production process, market structure, international trade and government intervention.

Psychology (1 semester, 10th-12th only) The study of behavior as well as the causes of behavior. Students will study human growth and development and its effect on personality, learning, memory, extremes of intelligence and motivation, psychological disorders and therapy.

***IB Psychology (11th/12th only)** Introduces students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles and phenomena associated with each of the major sub-fields within psychology. Students will study biological bases of behavior, states of consciousness, learning, cognition, motivation and emotion, personality, abnormal psychology, treatment of psychological orders, and social psychology

Sociology (11th/12th only) The student will gain an understanding of the meaning of culture as well as the importance of values and norms that are learned from cultures. The student will study the agents of childhood socialization, socialization in adulthood, discuss the nature vs. nurture debate, the effects of crime and deviance on the individual and society, and examine the effect of drugs and alcohol on decision making.

Science

Environmental Systems Students will gain an understanding of environmental issues and their own role in impacting the planet. Students will study air and water pollution, endangered species, human population, recycling, ecology and energy. This course is lab-based, hands-on and focused on current issues. This course involves some outdoor fieldwork for which students should be prepared.

***IB Astronomy** Students will study solar system astronomy and astrophysics. Students will trace the major historical milestones in developing a model of the solar system, current scientific tools employed in the study of individual bodies of the solar system, and the physical characteristics of all major bodies in the solar system. Students will study the vast expanse of the universe from individual stars to clusters of galaxies. The course will cover such topics as stellar classification, stellar evolution and cosmology. The major tool for the study of stars and galaxies, the electromagnetic spectrum and its detection, will also be studied.

Anatomy & Physiology A lab-oriented course that emphasizes the relationship between organ systems, homeostasis, and the interdependence of structure and function within the human body. It emphasizes manipulative laboratory skills, science process skills, dissection, and examination of anatomical structures and the use of medical terminology.

Aquatic Science The study the interactions of biotic and abiotic components in aquatic environments, including impacts on aquatic systems. Investigations and field work in this course may emphasize fresh water or marine aspects of aquatic science depending primarily upon the natural resources available for study near the school.

***AP Environmental Science** Students identify and analyze environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. Students will study air and water pollution, endangered species, human population, recycling, ecology and energy. In addition to an in-depth study of the course topics, students will gain exposure to professional literature in the field.



Bellaire High School Elective Course Descriptions

Fine Arts

***AP Music Theory (11th/12th only)**. Students will study the fundamentals of music notation, analysis, and composition. The topics covered include notation, melodic construction, harmony (triads through seventh chords), rhythm notations and dictation, and simple composition. Students will also study music composers important to the development of Western Music. This class is designed for those who are looking for training for careers as professional musicians.

Music Appreciation Students will grow in their understanding of music as they listen to classics from different time periods. Students will develop their ear to identify instruments, musical pieces, and musical periods by their sound. Students will also learn music terminology and music theory in order to express in writing accurate descriptions of music.

Theatre Arts Students will learn basic theatre etiquette, theatre history, basic theatre terminology, and introductory technical theatre concepts. Students will perform theatrical scenes, monologues, and improvisations and learn to critically examine theatrical performances.

Technical Theatre Students explore different technical aspects such as, costume and set design and make-up techniques, basic lighting and sound theory, and stage management concepts. Students will also become acquainted with basic theatrical terms and theater history.

Agriculture

Principles of Agriculture (1 semester) This course is an introductory class that prepares students for other classes in agriculture, food, and natural resources. The emphasis is on career opportunities, personal development, globalization, industry standards, details, practices, and expectations.

Equine Science (1 semester) In this concentrated study of horses, topics covered will include breeds, selection, uses, and other horse-related aspects of the agribusiness industry. Nutrition, reproduction, health and management of horses, and related enterprises will be emphasized.

Livestock Production (1 semester) This course is an in-depth study to develop knowledge and skills pertaining to all areas and kinds of livestock production. Topics which give the student an insight into livestock management include animal foods, nutrition and growth, reproduction, animal health, animal handling techniques, and livestock sales.

Small Animal Management (1 semester) This course is designed for students preparing for careers in the field of animal science. Small animals which may be included in the course of study include, but are not limited to, small mammals, amphibians, reptiles, avian, dogs, and cats.

Veterinary Medicine This course is designed for students preparing for careers in the field of animal science. Topics covered include, but are not limited to career opportunities, entry requirements, industry expectations, animal systems, and veterinary practices as they relate to both large and small animal species.

Advanced Animal Science This course is designed for students preparing for careers in the field of animal science. Emphasis will be placed on the interrelatedness of human, scientific, and technological dimensions of livestock production. Instruction is designed to allow for the application of scientific and technological aspects of animal science through field and laboratory experiences.

Ag Mechanics/Metal Technology This course is designed to develop an understanding of agricultural mechanics as it relates to safety and skills in tool operation, electrical wiring, plumbing, carpentry, fencing, concrete, and metal working techniques.

Ag Facilities Design Fabrication The student will have the opportunity to develop skills in electric arc welding, in oxy-fuel welding, and in the construction of equipment needed in agriculture uses. Areas will include safety procedures, use and identification of metals, design of structures, repairs of equipment, and use of hand and power tools related to metal fabrication.



Bellaire High School Elective Course Descriptions

Business

Principles of Business (1 semester) An introduction course where students gain knowledge and skills in economics and private enterprise systems, the impact of global business, marketing of goods and services, advertising and product pricing. Students analyze the sales process and financial management principles. This course allows students to reinforce, apply, and transfer academic knowledge and skills to a variety of interesting and relevant activities, problems and settings in business, marketing, and finance.

Money Matters (1 semester) In Money Matters, students will gain an understanding of the fundamental principles of money and personal financial planning. Special emphasis is placed on bank record management, use of credit, investing, insurance, and budgets. In addition, students are introduced to financial market and securities analysis.

Banking Financial Services (1 semester) This course will focus on the development of Banking and Financial Services in the United States. Students will learn current laws and regulations under which Banks and Financial Services companies must operate.

Securities & Investments (1 semester) A study of how to abide by the laws and regulations in order to manage business operations and transactions in the securities industry. The student will learn how to access, process, maintain, evaluate, and disseminate information to assist in making decisions common to the securities industry.

Business Law (1 semester) Students analyze the social responsibility of business and industry regarding the significant issues relating to the legal environment, business ethics, torts, contracts, negotiable financial instruments, personal property, sales, warranties, business organizations, concept of agency and employment, and real property.

Human Resource Management (1 semester) Students will learn resume, policies, interviewing, evaluation, assessments, EEO, salaries, sexual orientations, dress codes, how to read job descriptions, training programs, working with co-workers, clock hours, Davis-Bacon Act, weekly vocabularies, safety plans, I-9 forms, W2 forms, check writing, cursive writing. Weekly vocabularies, pre-employment test, drug testing, clocking in/out, stock understanding and defining, 403 plans, healthcare, vacation. Sick leave, days off, Affirmative action, Age Discrimination in Employment, benefits, compensations, calculating work hours, coworkers taking advantage of you, credit unions(options) etc.

E-Tail, Retail (1 semester) In Retailing and E-tailing, students will develop skills that involve electronic media techniques necessary for a business to compete in a global economy. Students will coordinate online and off-line marketing including providing web presence, and using decision-making models, case studies, various technologies, and business scenarios. Students taking this course should consider also taking Advertising and Sales Promotion, Virtual Business, and/or Global Business.

Accounting I Students investigate the field of accounting, including how it is impacted by industry standards. Students engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information using accounting software. Students formulate and interpret financial information for use in management decision making.

Accounting II (Must have completed Accounting I) A study of analyzing, classifying and recording business transactions in a manual and computerized environment. Emphasis is on understanding the complete accounting cycle, preparing financial statements, and preparing payroll for all types of businesses is studied

Principles of Information Technology Students develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment.

Practicum in Business Management The Practicum is designed to give students supervised practical application of previously studied knowledge and skills. Practicum experiences occur in a paid or unpaid arrangement and a variety of locations appropriate to the nature and level of experience. Students are required to work in an office setting 15-20 hours per week during the hours of 1-5 PM (Monday – Friday).

Pre-IB Business Management This elective is open only to those students who are committed to the IB program at Bellaire.



Bellaire High School Elective Course Descriptions

Technology Application

***AP Computer Science Principles** This course is an introduction to computing and programming with an emphasis on problem solving. Students who learn to design programs properly learn to analyze a problem statement; express its essence, abstractly and with examples; formulate statements and comments in a precise language; evaluate and revise these activities; and pay attention to details. This benefits all students, not just those who wish to study computing. For students who want to pursue other disciplines, this curriculum shows how they can use computing to model the phenomena they will encounter elsewhere.

*** AP Computer Science** This is a college level programming course intended for students who want to major in computer science and other disciplines that require a significant involvement with computing. This course has an emphasis on programming methodology with a concentration on problem solving and algorithm development. It includes a study of data structures and abstraction. This course includes independent study to prepare for the AP test in the JAVA programming language.

Digital Art & Animation This course introduces 2- and 3-D digital imagery. Topics include digital composition, design principles, raster and vector based 2-D graphic design and animation, and 3-D modeling and animation. Students use software, digital cameras and scanners to create and edit digital designs for a range of purposes including fine art and art for publication.

Dual Credit Options

Digital Media This class incorporates all aspects of Graphic Design. Graphic Design is a program of study encompassing design, illustration, and production techniques. The program utilizes current software applicable to the electronic print publishing industry. Study includes page layout, digital editing and imaging and vector.

Web Technology This course is an overview of the modern Web technologies used for the Web development. The purpose of this course is to give students the basic understanding of how things work in the Web world from the technology point of view as well as to give the basic overview of the different technologies. The topics include (although in some cases briefly): History of the Web, Hypertext Markup Language (HTML), Extensible HTML (XHTML), Cascading Style Sheets (CSS), and JavaScript. We will follow the guidance of the World Wide Web Consortium (W3C) to create interoperable and functional websites.

Principles of Information Technology Students develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication and reasoning skills and apply them to the information technology environment. A variety of computer projects, hands on activities and projects using Microsoft Word, Excel, PowerPoint, Publisher and the internet are integrated throughout the curriculum.

Human Services

Life, Nutrition & Wellness (1 semester) This combination classroom/laboratory course allows students to apply the principles of lifetime wellness and nutrition to assist them in making informed choices that promote good health, as well as pursue careers related to nutrition. Students study the principles of nutrition, digestion, calories, and metabolism, diet-related diseases, food allergies, therapeutic/fad dieting, and safety and sanitation in food preparation. Some cooking lab experiences will be included.

Culinary Arts (11th/10th only) Culinary Arts begins with the fundamentals and principles of the art of cooking and the science of baking and includes management and production skills and techniques. Students can pursue a national sanitation certification, a Texas culinary specialist certification, or any other appropriate industry certification.

***AP Courses are college level courses. Students can expect at least 1 hour of homework/ night.
Students will take the College Board AP exam in May.**