



# Obridge Academy

## Catalog 2014



Middle School Courses	Credits
<b>Art / Visual Arts</b>	
Art 100	1.0
Television Production	1.0
Theatre	1.0
<b>English</b>	
6th Grade Language Arts	1.0
7th Grade Language Arts	1.0
8th Grade Language Arts	1.0
<b>Health / Physical Education</b>	
Health 2011	0.5
Physical Education	0.5
Stress Management I	0.5
<b>Mathematics</b>	
6th Grade Math	1.0
7th Grade Math	1.0
8th Grade Pre Algebra	1.0
<b>Music</b>	
Music Appreciation	1.0
<b>Science</b>	
6th Grade Science	1.0
7th Grade Life Science	1.0
8th Grade Earth Science	1.0
<b>Social Studies</b>	
6th Grade Social Studies	1.0
7th Social Studies	1.0
8th Grade Civics	1.0
<b>STEM Computer Programming/Computer Science</b>	
GD: Intro to Game Industry	1.0
IT: Intro to Computers	0.5

*Middle School Courses*

High School Courses	Credits
<b>Art / Visual Arts</b>	
Art 100	1.0
Television Production	1.0
Theatre 100	1.0
<b>Business Technology</b>	
BA: Accounting I	1.0
BA: Intro to Marketing	0.5
BA: Mass Communication	0.5
BA: Business Foundations	1.0
BA: Communication Principles	1.0
BA: Entrepreneurship	0.5
BA: Intro to Business	0.5
<b>English</b>	
Creative Writing	0.5
English 9 - M/J English Skills	1.0
Honors: English 9	1.0
English 10	1.0
Honors: English 10	1.0
English 11	1.0
Honors: English 11	1.0
English 12	1.0
Honors: English 12	1.0
<b>Foreign Language</b>	
French I	1.0
French II	1.0
Spanish I	1.0
Spanish II	1.0
<b>Health / Physical Education</b>	
Health	0.5
Physical Ed	0.5
Stress Management I	0.5
<b>Health Science</b>	
HS: Dental Assisting	1.0
HS: Dental Matierals	1.0

*High School Courses*

HS: Dental Instruments Set Up	1.0
HS: Intro to Nursing	1.0
<b>Mathematics</b>	
9th Grade Pre-Algebra	1.0
Algebra I	1.0
Algebra II	1.0
Honors: Algebra II	1.0
Geometry	1.0
Honors: Geometry	1.0
Pre-Calculus	1.0
Statistics	1.0
Trigonometry	1.0
Consumer Math	1.0
<b>Music</b>	
Music Appreciation	1.0
<b>Science</b>	
Anatomy/Physiology	1.0
Astronomy	0.5
Biology	1.0
Honors: Biology	1.0
Botany	1.0
Chemistry I	1.0
Honors: Chemistry	1.0
Environmental Science	1.0
Inorganic Chemistry	1.0
Physical Science	1.0
Physics	1.0
Zoology	1.0
<b>Social Studies</b>	
American Government	0.5
American History	1.0
Honors: American History	1.0
Anthropology	1.0
Economics	0.5
Geography	1.0

*High School Courses*

World History	1.0
World History/Geography	1.0
<b>Social Sciences</b>	
CJ: Crime Scene Technology A	0.5
CJ: Crime Scene Technology B	1.0
CJ: Intro to Criminal Justice	1.0
CJ: Criminal Law	1.0
CJ: Juvenile Justice	1.0
Psychology	0.5
Sociology	0.5
<b>STEM Computer Programming/Computer Science</b>	
GD: Intro to Game Industry	1.0
IT: Multimedia & Graphics	0.5
IT: Word Processing	1.0
IT: Intro to Computers	0.5

## Art / Visual Arts

### ART 100



#### COURSE DESCRIPTION

Art 100 is a multi-cultural survey of art from prehistoric times to the precursors of the Renaissance period. It stresses basic art principles (line, form and content) and the media and methods of visual art. The course is a history of man and his relationship with art.

#### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Prehistory and Prehistoric Art
- Ch.3 - Art of the Ancient Near East
- Ch.4 - Art of Egypt
- Ch.5 - Aegean Art
- Ch.6 - Art of Greece
- Ch.7, 8 - Etruscan Art and Roman Art
- Ch.9 - Art History - Mid-Term Exam
- Ch.10 - Early Christian, Jewish and Byzantine Art
- Ch.11 - Islamic Art
- Ch.12 - Art of the Americas before 1300
- Ch.13,14 - Early Medieval Art, Romanesque Art
- Ch.15 - Romanesque Art
- Ch.16 - Gothic Art
- Ch.17 - Final Exam Review and Exam

#### COURSE OBJECTIVES

Understand that "Art is the Mirror of Mankind". They intertwine. Examine the various approaches to art and the materials and techniques employed. Classify selected works and their creators. Explore the historical development of painting, architecture and sculpture. Develop a familiarity with the visual language of art (form and content, design principles) and the various media employed. Develop a fondness for art and history.

ART 100

## Television Production



### COURSE DESCRIPTION

This course is an introduction to the basic principles, procedures, and techniques of television production. The course includes video control, special effects, operation of cameras and editing machines, composition, lighting, staging, and directing, on-camera announcing and interviewing.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - TV Production Overview
- Ch.3 - Quiz
- Ch.4 - Program Proposals
- Ch.5 - Capturing/Holding Viewer Attention
- Ch.6 - Quiz
- Ch.7 - Fifteen Production Steps
- Ch.8 - Quiz
- Ch.9 - Scripts
- Ch.10 - Quiz
- Ch.11 - Costing-Out A Production
- Ch.12 - The TV Process
- Ch.13 - World Television Standards
- Ch.14 - Quiz
- Ch.15 - Lenses
- Ch.16 - F-Stops and Creative Focus
- Ch.17 - Quiz
- Ch.18 - Filters and Lens
- Ch.19 - Final Elements
- Ch.20 - Wonderful World of Color
- Ch.21 - Quiz
- Ch.22 - Video Camera Operation
- Ch.23 - Color Balancing Cameras
- Ch.24 - Creative Control
- Ch.25 - View Finders
- Ch.26 - Quiz
- Ch.27 - Camera Prompters
- Ch.28 - Composition and Graphics
- Ch.29 - Elements of Composition
- Ch.30 - Elements of Composition II
- Ch.31 - Elements of Composition III

Ch.32, 33 Graphics and Virtual Reality Sets  
Ch.34 - Lighting  
Ch.35 - Lighting II  
Ch.36 - Lighting III  
Ch.37, 38- Audio  
Ch.39 - Audio II  
Ch.40, 41- Video Recording  
Ch.42, 43 - Editing  
Ch.44 - Editing II  
Ch.45, 46 - Producing/Directing  
Ch.47, 48 - News and Documentary  
Ch.49, 50 - Legal and Ethical  
Ch.51, 52 - Non Broadcast Television

*Television Production*

## Theatre



### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Art and the Artist
- Ch.3 - What is Theatre
- Ch.4 - The Audience
- Ch.5 - Methods for Analyzing
- Ch.6 - Writing Theatrical Reviews
- Ch.7 - The Playwright
- Ch.8 - The Producer
- Ch.9 - The Director
- Ch.10 - The Actor
- Ch.11 - The Designers
- Ch.12 - Greek Drama
- Ch.13 - Roman Drama
- Ch.14 - Medieval Drama
- Ch.15 - Italian Renaissance Theatre
- Ch.16 - English Renaissance / Shakespeare
- Ch.17 - Neoclassic Drama
- Ch.18 - Restoration Drama
- Ch.19 - Realistic Drama
- Ch.20 - Anti Realism
- Ch.21 - Modern Theatre
- Ch.22 - Final Exam
- Ch.23 - Course Survey

### COURSE OBJECTIVES

Students will be introduced to all aspects of the theatre as a living art form. Students will gain an appreciation for and an understanding of the practical and historical aspects of the theatre and the theatre experience as they relate to:

1. The origins of theatre in myth and ritual.
2. The basic elements of actor/ space/ audience.
3. Dramatic forms and conventions.
4. The theatre artists and theatre as a collaborative art.
5. Commercial realities of theatrical production.
6. Dramatic theory and criticism.
7. Elements necessary to bring a dramatic script to life.
8. Aesthetics

# Business Technology

## BA: Accounting I



### COURSE DESCRIPTION

An introduction to accounting emphasizing how general purpose financial statements communicate information about the business corporation's performance and position for users external to management. Approximately one third of the course emphasizes how the accountant processes and presents the information and includes exposure to recording transactions, adjusting balances and preparing financial statements for service and merchandise firms according to established rules and procedures. The balance of the course examines major elements of the statements such as cash, receivables, inventory, long-lived assets, depreciation, payroll, bonds, and other liabilities and stocks.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Introduction
- Ch.3 - Accruals
- Ch.4 - Deferrals
- Ch.5 - Double-entry Accounting
- Ch.6 - Business Accounting
- Ch.7 - Advanced Accruals
- Ch.8 - Inventory Accounting
- Ch.9 - Long-term Assets
- Ch.10 - Cost Behavior

### OBJECTIVES

The prime objective of this course is to introduce students to the double-entry system of accounting for sole proprietorship, corporate, and partnership forms of business enterprises by using real-world applications and connections. Other important objectives include the following: To help students develop personal and professional skills for school and work. To help students understand the relationship between the manual system of accounting and a computerized system. To help students find success in accounting.

## BA: Intro to Marketing



### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - What is Marketing
- Ch.3 - Marketing Environment
- Ch.4 - Consumer Buying Behavior
- Ch.5 - Marketing Research Process
- Ch.6 - What is a Market
- Ch.7 - Promotion
- Ch.8 - Pricing
- Ch.9 - Market Segmentation

### OBJECTIVES

A main objective of marketing is to create customer value. Marketing usually involves an exchange between buyers and sellers or between other parties. Marketing has an impact on the firm, its suppliers, its customers, and others affected by the firm's choices.

Marketing frequently involves enduring relationships between buyers, sellers, and other parties. The processes involved include "creating, communicating, delivering, and exchanging offerings." Another objective is to develop the student's understanding of Marketing and to appreciate the importance of the separate marketing functions, the management of these functions, and how each function affects other functions within the marketing domain. The major functions are marketing management, marketing research, product planning, distribution channels, pricing and promotion. The course will emphasize consumer markets over business markets. It takes advantage of the Internet to cover marketing issues.

## BA: Mass Communication



### COURSE DESCRIPTION

Mass Communication looks at the role mass media has played, and continues to play, in American culture. They are analysts and historians, examining everything from 19th Century Harper's political cartoons to the newest McDonald's commercial. Given the enormous effect of the media on our daily lives, Mass Communication seeks out how and why they reflect our social values. They also describe how public policy draws boundaries.

We are bombarded with images and messages every day of our lives, from billboards towering over the highway, to television commercials, newspaper ads, leaflets, brochures, and radio advertising. These messages shape our culture and define our perceptions, influencing the way we think and look at almost everything from a candy bar to geopolitics.

Mass Communication is located within a broader communication major that more generally examines the ways in which information is created and distributed, whether through a television commercial or a personal e-mail.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - We are the People
- Ch.3 - Books
- Ch.4 - Newspapers
- Ch.5 - Magazines
- Ch.6 - The Movies
- Ch.7 - Radio
- Ch.8 - Television
- Ch.9 - Music and Recording Industry

### OBJECTIVES

Strong reading and analytical skills will come in handy in Mass Communication, so courses in English and advanced math (like statistics) are a must. Watch the news, movies, and the commercials in between them. Listen to what your friends have to say when the conversation turns to the media. They are members of the masses, after all.

## BA: Business Foundations



### DESCRIPTION

Students will be able to explain the role and function of business in the United States economy. Students will be able to describe leadership characteristics and human relations skills needed by managers. Students will analyze the role of supply and demand in the United States economy. Students will identify the roles of marketing and analyze the impact of marketing on the individual, on business, and on society. Students will be able to define a code of ethics, develop a code of ethics, and apply a code of ethics to various cases confronted by business. Students will be able to describe ways in which international business is important to the United States economy. Students will be able to relate balance of trade concepts to the import/export process. Students will be able to describe what is needed to become an informed consumer as well as become familiar with the rights and responsibilities of consumers. Students will be able to identify the opportunity costs and trade-offs involved in making choices about how to use scarce economic resources. Students will learn the importance of managing limited personal financial resources and recognize that more of the wants and needs of a society can be satisfied if wise consumer decisions are made. Students will become familiar with, evaluate and compare the services offered by banks and other financial consumers. Students will become familiar with different savings plans and explain why savings is important to consumers. Students will become familiar with stock and bond investment options. Students will be able to explain what credit is, how it is granted, and identify appropriate uses of credit by individuals and businesses.

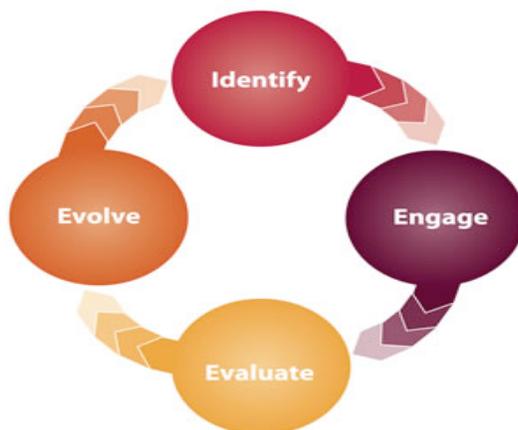
### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Business Operations
- Ch.3 - Project 1 - Supply & Demand
- Ch.4 - Business Organization
- Ch.5 - Project 2 - Management
- Ch.6 - Marketing Goods and Services
- Ch.7 - Project 3 - Market Process
- Ch.8 - Advertising
- Ch.9 - Project 4 - Advertising
- Ch.10 - Consumers in the Economy
- Ch.11 - Project 5 - Consumer Behavior
- Ch.12 - Accounting & Financial Institutions
- Ch.13 - Money & Financial Institutions
- Ch.14 - Stocks and Bonds
- Ch.15 - Entrepreneurship
- Ch.16 - Human Resource Management
- Ch.17 - Information Processing

### OBJECTIVES

This course objective is to exam the fields of business and to offer an insight into and provide an opportunity for participation in the managerial decision-making process. You will also build a vocabulary of business terms that will aid in selecting a field of vocational application or specialization.

## BA: COMMUNICATIONS PRINCIPLES



### CHAPTERS

- Ch.1 -Welcome to Class
- Ch.2 -Foundations of Communications
- Ch.3 -Perception and Listening
- Ch.4 -Verbal Communications
- Ch.5 -Nonverbal Communication
- Ch.6 -Interpersonal Communications
- Ch.7 -Relationships
- Ch.8 -Interpersonal Communications and Culture
- Ch.9 -Lifecycles and Relationships
- Ch.10 -Interpersonal Communications and Conflict
- Ch.11-Professional and Crisis Communication

### OBJECTIVES

- After completing this chapter, you should be able to:
- Understand the importance of communication.
  - Define communication.
  - Describe communication as a process.
  - Identify and describe four models of communication.
  - Identify and describe eight essential components of communication.
  - Identify and describe five types of communication contexts.
  - Describe five key principles of communication.

## BA: ENTREPRENEURSHIP



### COURSE DESCRIPTION

In this course you will evaluate the necessary qualities and characteristics of the successful entrepreneurial profile.

Recognize and determine the steps necessary to open and operate a small business enterprise.

Critique the basic forms of small business ownership.

Identify the marketing, financial, leadership and other competencies needed by an entrepreneur.

Use information, projections, logic and critical thinking to recognize an opportunity and solve small business problems in a multicultural, ethical and legal environment.

Develop a Business Plan and plan for Management Succession.

### CHAPTERS

Ch.1 - Welcome to Class

Ch.2 - Introduction

Ch.3 - The Foundations of Entrepreneurship

Ch.4 - Inside the Entrepreneurial Mind: From Ideas to Reality

Ch.5 - Strategic Management and the Entrepreneur

Ch.6 - Forms of Ownership and Franchising

Ch.7 - Buying an Existing Business

Ch.8 - Entrepreneurship - Exam I

Ch.9 - Building a Powerful Marketing Plan

Ch.10 - E-Commerce and the Entrepreneur

Ch.11 - Integrated Marketing Communication and Pricing Strategies

Ch.12 - Managing Cash Flow

Ch.13 - Entrepreneurship - Exam II

Ch.14 - Creating a Successful Financial Plan

Ch.15 - Creating a Winning Business Plan

Ch.16 - Sources of Funds: Equity and Debt

Ch.17 - Choosing the Right Location and Layout

Ch.18 - Global Aspects of Entrepreneurship

Ch.19 - Leading the Growing Company and Planning for Management Success

Ch.20 - Entrepreneurship - Exam III

Ch.21 - Business Plan Submission

BA: ENTREPRENEURSHIP

## Intro to Business



### COURSE DESCRIPTION

Business Essentials is a foundations course for the Small Business Development Career Pathway. It is also appropriate for students enrolled in any Career Pathway who plan to own and operate their own businesses. The course will help students build a strong knowledge base and develop management skills as they study forms of business ownership, functions of management, budgeting and finance, technology, communications, legislation, leadership and teamwork, marketing, and economics. Mastery of these standards through project-based learning and leadership development activities of the Career and Technical Student Organizations will help prepare students with a competitive edge for the global marketplace.

### CHAPTERS

- Ch. 1 - Welcome to Class
- Ch. 2 - The Economy and You
- Ch. 3 - Owning and Operating a Business
- Ch. 4 - Influences on Business
- Ch. 5 - Marketing
- Ch. 6 - Financial and Technological resources
- Ch. 7 - Career Planning in a Global Economy
- Ch. 8 - Credit
- Ch. 9 - Money Management
- Ch. 10 - Risk Management

## Health / Physical Education

### Health



#### COURSE DESCRIPTION

Physical health is the overall condition of a living organism at a given time, the soundness of the body, freedom from disease or abnormality, and the condition of optimal well-being. People want to function as designed, but environmental forces can attack the body or it may have genetic malfunctions. The main concern in health is healing damage caused by injuries and biological attacks.

Questions you may have about what health is include:

How does health relate to the function of the body?

What about getting sick or injured?

How is healing related to health?

#### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Promoting Healthy Behavior Change
- Ch.3 - Psychosocial Health
- Ch.4 - Managing Stress
- Ch.5 - Violence and Abuse
- Ch.6 - Avoiding Risks from Harmful Habits
- Ch.7 - Alcohol, Tobacco, and Caffeine
- Ch.8 - Nutrition
- Ch.9 - Managing Your Weight
- Ch.10 - Personal Fitness
- Ch.11 - Cardiovascular Disease
- Ch.12 - Environmental Health
- Ch.13 - Cancer

## Physical Education



### COURSE DESCRIPTION

This course is devoted to the study of physical education, sport and kinesiology from ancient times to the present. We will define the field and examine its foundation, philosophy, cultural differences, careers and the future of physical education.

### CHAPTERS

- Ch.1 - Welcome To Class
- Ch.2 - Healthy Heart
- Ch.3 - Eating Right
- Ch.4 - Calories
- Ch.5 - Food Guide Pyramid
- Ch.6 - Sports Fitness
- Ch.7 - Heart Strong
- Ch.8 - Design A Game
- Ch.9 - Physical Activities After PE
- Ch.10 - Nutrition and Fitness
- Ch.11 - Drug Addiction
- Ch.12 - Fitness Quest
- Ch.13 - Heatstrokes and Sports
- Ch.14 - I am Joe's or Jane's
- Ch.15 - Physical Education Web quest
- Ch.16 - Swimming
- Ch.17 - Football
- Ch.18 - Baseball
- Ch.19 - Golf
- Ch.20 - Final Project

## Stress Management I



### COURSE DESCRIPTION

This course studies the impact of stress upon the psychological and physiological function of the body and also explores the interaction with stress management techniques. This course does not constitute credit toward meeting the Physical Education GER requirement.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Stress Concepts
- Ch.3 - Healthy Lifestyles
- Ch.4 - Stress Relief
- Ch.5 - Stress Is Everywhere
- Ch.6 - Understanding Stress
- Ch.7 - Pin-Pointing Stress in Life
- Ch.8 - Targeting Stress Effectively
- Ch.9 - Work Overload
- Ch.10 - Surviving Problem Jobs
- Ch.11 - Co-Workers and Stress
- Ch.12 - Environmental Stress
- Ch.13 - Performance Stress
- Ch.14 - Reducing Stress
- Ch.15 - Final Exam

### COURSE GOAL:

The course goal is to provide an understanding of the causes and effects of stress on a person's life and to introduce methods for enhancing positive health and reducing stress through a variety of relaxation, self-regulation and stress management strategies. The student will also gain knowledge and application skills for stress management interventions useful in a professional setting.

## Health Science

### HS: Dental Assisting



#### **COURSE DESCRIPTION**

This course provides a better understanding of human interaction in the dental office. And studies motivation and learning experiences as related to health professionals and human behavior.

#### **CHAPTERS**

- Ch.1 - Welcome to Class
- Ch.2 - Preventive Dentistry
- Ch.3 - Operative Dentistry
- Ch.4 - Oral Surgery Assistance
- Ch.5 - Periodontic Assistance
- Ch.6 - Endodontic Assistance
- Ch.7 - Prosthodontic Assistance
- Ch.8 - Dental Treatment Room Emergencies

*HS: Dental Assisting*

## HS: DENTAL MATERIALS



### COURSE DESCRIPTION

Dental materials used in the dental profession are indeed many, varied, and complex. The dental specialist who prepares and uses many of these materials in assisting the dental officer must know their composition, properties, uses, and manipulation. Restorative materials, miscellaneous dental materials, dental waxes, gypsum products, and impression materials are covered in this sub-course. A thorough knowledge of dental materials and the skill to manipulate these materials is one of the important duties of a dental specialist.

### CHAPTERS

- Ch. 1 – Introduction to Dental Materials
- Ch. 2 – Dental Amalgam
- Ch. 3 – Dental Bases and Cements
- Ch. 4 – Dental Resins For Restorative Dentistry
- Ch. 5 – Miscellaneous Dental Materials
- Ch. 6 – Dental Gold and Gold Alloys
- Ch. 7 – Gypsum Products
- Ch. 8 – Dental Waxes
- Ch. 9 – Impression Materials

## Dental Instruments Setups



### COURSE DESCRIPTION

In the age of four handed, sit-down dentistry, a well-trained assistant is an integral part of dental procedures. Part of your responsibility will be to anticipate the dental officer's next move and have the instruments ready when he needs them. To do this, you must have a thorough knowledge of the procedures the dental officer will follow and of the appropriate instruments used in each of these procedures. Your knowledge, combined with practice, will add to the efficiency of the dental officer and the comfort of the patient. An efficient assistant, it has been shown, will enable the doctor-assistant team to handle fifty percent more patients.

### CHAPTERS

- Ch. 1 – Welcome to Class
- Ch. 2 – Introduction
- Ch. 3 – The Basic Oral Examination
- Ch. 4 – Standard Procedures
- Ch. 5 – Anesthetic Instruments
- Ch. 6 – Restorative Instruments
- Ch. 7 – Instruments
- Ch. 8 – Instrument Setups and Procedures
- Ch. 10 – Surgical Instruments
- Ch. 11 – General Instruments
- Ch. 12 – Instrument Setups and Procedures II
- Ch. 13 – Periodontal Instruments
- Ch. 14 – Endodontic Instruments
- Ch. 15 – General Prosthodontics Instruments
- Ch. 16 – Procedures
- Ch. 17 - Appendixes

## HS: Intro to Nursing



### COURSE DESCRIPTION

This course introduces students to essential characteristics of professional nursing practice in today's health care system and the interconnected global community. Concepts to be explored include the history and theoretical basis of the nursing profession, the profession as part of a wider health care community and delivery system, professional communication, self-understanding and self-care as means to promote health and wellness of self and others. An introduction to the responsibility of self-directed, life-long learning and evidence based practice is included. An emphasis will be placed on the complexity and holism of culturally sensitive nursing care in relation to the diversity of patients.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Basic Human Needs
- Ch.3 - Communication Skills
- Ch.4 - Reaction To Stress
- Ch.5 - Transcultural Factors
- Ch.6 - Adult Patient Care Unit
- Ch.7 - Principles of Patient Hygiene
- Ch.8 - Techniques of Body Mechanics
- Ch.9 - Positioning and Ambulating
- Ch.10 - Motion Exercise
- Ch.11 - Course Survey

## English

### 6th Grade Language Arts



#### COURSE DESCRIPTION

Over the course of this year, students will gain a variety of knowledge and experience in the field of Language Arts. This course is a standard-based program designed to support all students in meeting grade level standards in reading, writing, listening, and speaking. Students will learn reading comprehension, literacy response and analysis, vocabulary, writing skills, and listening and speaking skills.

#### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Reading: Sharing Our Stories
- Ch.3 - Chapter 1 Test & Assignment
- Ch.4 - Reporting the News
- Ch.5 - Chapter 2 Test & Assignment
- Ch.6 - Explaining How
- Ch.7 - Chapter 3 Test & Assignment
- Ch.8 - Comparing and Contrasting
- Ch.9 - Chapter 4 Test & Assignment
- Ch.10 - Responding to a Novel
- Ch.11 - Chapter 5 Test & Assignment
- Ch.12 - Sharing Your Research
- Ch.13 - Chapter 6 Test & Assignment
- Ch.14 - Making a Difference
- Ch.15 - Chapter 7 Test & Assignment
- Ch.16 - Writing Effective Sentences
- Ch.18 - Learning About Paragraphs
- Ch.20 - The Sentence
- Ch.22 - Parts of Speech
- Ch.24 - Parts of Speech II
- Ch.26 - The Phrase and the Clause

#### COURSE OBJECTIVES

- The student will:
1. Demonstrate their knowledge and understanding of word origins to determine the meaning of grade level appropriate words.
  2. Demonstrate their ability to read and understand grade level appropriate material.

3. Demonstrate knowledge of grade level vocabulary.
4. Demonstrate a clear and coherent form of essay writing, which contain introductions, supporting evidence, and conclusions.
5. Demonstrate an understanding of the English language by writing narrative, response to literature, persuasive, and descriptive essays.
6. Write and speak with an understanding of standard English conventions are appropriate to this grade level, by delivering formal presentations using a variety of strategies.

## 7th Grade Language Arts



### COURSE DESCRIPTION

In seventh grade language arts students will read independently for extended periods of time. They will analyze the connections between the texts they read and the real world. They will demonstrate how to paraphrase, evaluate, and summarize the information they read. They will further analyze the differences between fact and opinion. Students will also continue to detect bias in the texts they read. Seventh grade students will further analyze conflict and will continue identifying imagery and symbolism.

In addition, they will evaluate point of view and analyze figurative language and identify elements of poetry. Students will apply objective criteria for evaluating texts. Students will analyze the meanings of complex words by using their knowledge of roots and affixes. In grade seven, students will hone their prewriting strategy skills bases on specific audiences and/or purposes. They will revise their work using collaboration, conferencing, and self-evaluation. They will edit for language conventions such as syntax, and word usage. Students will develop skills in writing for various formats, including expressive and informational pieces and business letters. In grade seven students will also hone their writing skills to explain and inform.

They will continue to learn, entertain, and describe through writing as well as begin writing to persuade analyze, and transact business. They will respond to texts both orally and in writing. In grade seven, students will listen for meaning in conversations and discussions and effectively summarize them. Students will listen more attentively as group members continue suing critical analysis to formulate appropriate oral responses. In grade seven students will continue asking questions to investigate a topic. They will also enhance their ability to access information from a variety of sources as well as hone their skill in conducting independent research and summarizing the information they gather. Fluency and conventions are taught through mini lessons that incorporate actual student writing.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Introduction
- Ch.3 - Eyewitness
- Ch.4 - Explaining a Process
- Ch.5 - Advantages/Disadvantages
- Ch.6 - Previewing a Novel
- Ch.7 - Effective Sentences
- Ch.8 - Paragraphs
- Ch.9 - Grammar: The Sentence
- Ch.10 - Grammar: Parts of Speech
- Ch.11 - Grammar: Verb
- Ch.12 - Grammar: Phrases
- Ch.13 - Grammar: Clauses
- Ch.14 - Grammar: Simple Sentence
- Ch.15 - Grammar: Subject & Verb Agreement

## 8th Grade Language Arts



### COURSE DESCRIPTION

8th Grade English is a course focused on improving skills fundamental to every aspect of a student's education -- reading and writing. Structured in a workshop format, students will be stretched by reading both choice novels and mentor texts, as they strive to become better readers, writers, and communicators. By reading a variety of genre, connections will be made between history and literature, fostering an appreciation for language and creative expression.

8th grade Language Arts is about practicing and building upon the skills you have acquired as students of English. You should be prepared to read independently. You will learn to analyze and evaluate the materials you read, make connections with and between the literature you are exposed to and you will engage in a literary community by forming and stating opinions about themes and ideas presented by many different authors. You will write, both creatively and for purpose. You are required to present a portfolio of essential writings by the end of your 8th grade year. This portfolio must include a poetry piece, a research paper, a procedure paper, a personal essay, and a response to literature paper. You must also learn to summarize complicated informational text, write book reviews, and respond to on-demand and creative writing prompts. In addition to reading and writing, you will practice spelling, vocabulary and grammar on a weekly basis to prepare you for your high school English studies and for standardized exams. It is crucial that you be organized and prepared for class, that you build and practice responsibility and the habits of learning that will allow you to succeed.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Chapter 1
- Ch.3 - Sentence Grammar
- Ch.4 - Sentence Grammar II
- Ch.5 - Common Sentence Problems
- Ch.6 - Punctuation and Mechanics
- Ch.7 - Literary Genres
- Ch.8 - The Monkey Paw
- Ch.9 - The Tell-Tale Heart
- Ch.10 - There will come soft rain

## Creative Writing



### COURSE DESCRIPTION

The goal of Creative Writing is to improve the student's writing skills and techniques in regard to fiction, poetry, playwriting, and creative non-fiction. This course introduces some elementary skills and structures for the student interested in a general knowledge of creative writing, and helps to prepare the committed student writer for further study in the field.

Creative writing is one of the more popular curriculums offered today. We can only speculate on the reasons why, but it's my feeling that, contrary to so many curriculums necessarily based in technology and oriented towards specific vocational demands, the creative writing course is a place where the student's personal vision, history, and experience is most valued. What the student then discovers is a forum for self-expression that is so rare otherwise. The purpose of most creative writing courses is to improve the student's writing skills and techniques in regard to fiction, poetry, playwriting, and/or creative non-fiction. Likewise, it is the goal of this course is to introduce some elementary skills and structures for the student interested in a general knowledge of creative writing, and to help prepare the committed student writer for further study in the field. But an equally vital purpose of this particular creative writing course is to offer the student a space in which to explore the mysteries of his or her self. In fact, it is largely by means of self-exploration and self-reflection and self-expression that the best literary art is produced. And for at least the next several months, this is exactly how I would like you to view yourself: as a literary artist. In doing so, I would hope that you look at this course as more than simply fulfilling a requirement for a degree, though this is important too. I think your learning experience will be greatly enriched and made to last if you look at this study as a process of personal growth, as a journey, as an adventure into the heart of yourself and the world in which you live.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Five Senses in Writing
- Ch.3 - Conflict
- Ch.4 - Reflective Writing
- Ch.5 - Narrative
- Ch.6 - Using Themes

### OBJECTIVES

The goal of Creative Writing is to improve the student's writing skills and techniques in regard to fiction, poetry, playwriting, and creative non-fiction. This course introduces some elementary skills and structures for the student interested in a general knowledge of creative writing, and helps to prepare the committed student writer for further study in the field.

## English 9 M/J English Skills



### COURSE DESCRIPTION

The purpose of this course is to provide grade 9 students, using texts of high complexity, integrated language arts study in reading, writing, speaking, listening, and language in preparation for college and career readiness.

The content should include, but not be limited to, the following:

- active reading of varied texts for what they say explicitly, as well as the logical inferences that can be drawn
- analysis of literature and informational texts from varied literary periods to examine:
  - text craft and structure
  - elements of literature
  - arguments and claims supported by textual evidence
  - power and impact of language
  - influence of history, culture, and setting on language
  - personal critical and aesthetic response
- writing for varied purposes
  - developing and supporting argumentative claims
  - crafting coherent, supported informative/expository texts
  - responding to literature for personal and analytical purposes
  - writing narratives to develop real or imagined events
  - writing to sources using text-based evidence and reasoning
- effective listening, speaking, and viewing strategies with emphasis on the use of evidence to support or refute a claim in multimedia presentations, class discussions, and extended text discussions
- collaboration amongst peers

### CHAPTERS

- Ch.1 - Short Stories
- Ch.2 - Nonfiction
- Ch.3 - Poetry
- Ch.4 - Drama
- Ch.5 - Legends and Myths

## Honors: English 9



### COURSE DESCRIPTION

The purpose of this course is to improve the reading, writing, speaking, and listening skills of the student and prepare him/her for future coursework and life, in general.

The student will review and practice grammar and punctuation.

The student will develop vocabulary.

The student will practice different types of essay writing.

The student will read critically, informatively, and for pleasure.

The student will give informal book talks and make a formal research presentation.

The student will listen to teacher lectures and readings.

The student will listen to and critique films of short stories and novels.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Parts of Speech
- Ch.3 - Parts of Speech Review
- Ch.4 - Construct Sentences
- Ch.5 - Objects & Complements
- Ch.6 - Parallel Structures
- Ch.7 - Romeo & Juliet
- Ch.8 - To Kill A Mockingbird
- Ch.9 - Types of Essays
- Ch.10 - Writing Strategies
- Ch.11 - Essay Topic Assignment
- Ch.12 - Comprehension
- Ch.13 - Poetry
- Ch.14 - A Midsummer Night's Dream

Honors: English 9

## English 10



### COURSE DESCRIPTION

To expose students to a variety of literary genres to further their appreciation of literature

To develop students vocabulary-building skills through the use of context clues and word origin/structure analysis

To help students recognize and understand the use of a variety of literary elements (terms and techniques)

To enable students to respond to literature in a way that reflects intelligent and thoughtful analysis

To provide a wide range of learning opportunities, including daily and longer-term projects, in order that students of all ability levels may be able to reach their respective potentials and be successful

To foster a classroom atmosphere that emphasizes the importance of respect for others opinions, beliefs and ways of being

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Harrison Bergeron
- Ch.3 - Sentence Structure
- Ch.4 - "Everyday Use" and "On Quilting"
- Ch.5 - Punctuation
- Ch.6 - Searching for Summer
- Ch.7 - Information Sources
- Ch.8 - The Race to Save Apollo 13
- Ch.9 - Types of Essays
- Ch.10 - Shoofly Pie
- Ch.11 - Writing Strategies
- Ch.12 - Pronoun Usage
- Ch.13 - Essay Topic Assignment
- Ch.14 - Verb Usage
- Ch.15 - Business Letters
- Ch.16 - Comprehension
- Ch.17 - Poetry
- Ch.18 - A Midsummer Night's Dream
- Ch.19 - Subject-Verb Agreement
- Ch.20 - Editing Strategies
- Ch.21 - Capitalization
- Ch.22 - Drama: Julius Caesar
- Ch.23 - Myths/Legends: King Arthur
- Ch.24 - Narrative Essay
- Ch.25 - Comparison Essay
- Ch.26 - Short Story

## Honors: English 10



### COURSE DESCRIPTION

To expose students to a variety of literary genres to further their appreciation of literature

To develop students' vocabulary-building skills through the use of context clues and word origin/structure analysis

To help students recognize and understand the use of a variety of literary elements (terms and techniques)

To enable students to respond to literature in a way that reflects intelligent and thoughtful analysis

To provide a wide range of learning opportunities, including daily and longer-term projects, in order that students of all ability levels may be able to reach their respective potentials and be successful

To foster a classroom atmosphere that emphasizes the importance of respect for others' opinions, beliefs and ways of being

### CHAPTERS

Ch.1-Introduction

Ch.2-Sentence Structure

Ch.3-Punctuation

Ch.4-Information Sources

Ch.5-Types of Essays

Ch.6-Writing Strategies

Ch.7-Pronoun Usage

Ch.8-Essay Topic Assignment

Ch.9-Verb Usage

Ch.10-Business Letters

Ch.11-Comprehension

Ch.12-Poetry

Ch.13-A Midsummer Nights Dream

Ch.14-Subject-Verb Agreement

Ch.15-Editing Strategies

Ch.16-Capitalization

Ch.17-Drama: Julius Caesar

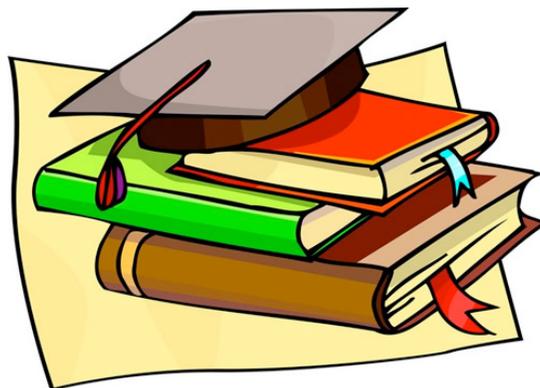
Ch.18-Myths/Legends: King Arthur

Ch.19-Narrative Essay

Ch.20-Comparison Essay

Ch.21-Short Story

## English 11



### COURSE DESCRIPTION

- To help students understand the importance of historic context in literary analysis
- To expose students to a variety of literary genres to further their appreciation of literature
- To develop students' vocabulary-building skills through the use of context clues and word origin/structure analysis
- To help students recognize and understand the use of a variety of literary elements (terms and techniques)
- To enable students to respond to literature in a way that reflects intelligent and thoughtful analysis
- To develop students' reading, writing, speaking, listening and critical thinking skills so that they may function effectively in any course at university level
- To help students create a body of written work (essay portfolio) that will facilitate the college application process
- To provide a wide range of learning opportunities, including daily and longer-term projects, in order that students of all ability levels may be able to reach their respective potentials and be successful
- To foster a classroom atmosphere that emphasizes the importance of respect for others' opinions, beliefs and ways of being

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Choosing the Right Words
- Ch.3 - Thesis Statement
- Ch.4 - The Great Gatsby
- Ch.5 - Traditional Essays
- Ch.6 - Transitional Devices
- Ch.7 - Compare/Contrast
- Ch.8 - Persuasive Essay
- Ch.9 - Narrative Essay
- Ch.10 - Listening Comprehension
- Ch.11 - Non Verbal Communication
- Ch.12 - Familiar Quotes
- Ch.13 - Argumentative Essays
- Ch.14 - Analytical Writing Rubric
- Ch.15 - Short Story
- Ch.16 - Genre
- Ch.17 - Editing
- Ch.18 - Reading Strategies
- Ch.19 - Punctuation Review
- Ch.20 - The Scarlet Letter
- Ch.21 - Descriptive Essay

## Honors: English 11



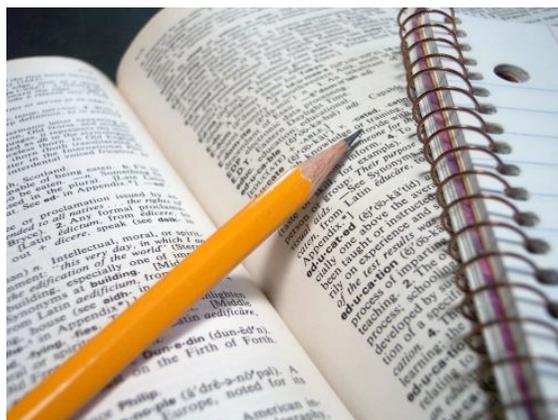
### COURSE DESCRIPTION

- To help students understand the importance of historic context in literary analysis
- To expose students to a variety of literary genres to further their appreciation of literature
- To develop students' vocabulary-building skills through the use of context clues and word origin/structure analysis
- To help students recognize and understand the use of a variety of literary elements (terms and techniques)
- To enable students to respond to literature in a way that reflects intelligent and thoughtful analysis
- To develop students' reading, writing, speaking, listening and critical thinking skills so that they may function effectively in any course at university level
- To help students create a body of written work (essay portfolio) that will facilitate the college application process
- To provide a wide range of learning opportunities, including daily and longer-term projects, in order that students of all ability levels may be able to reach their respective potentials and be successful
- To foster a classroom atmosphere that emphasizes the importance of respect for others' opinions, beliefs and ways of being

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Choosing the Right Words
- Ch.3 - Thesis Statement
- Ch.4 - The Great Gatsby
- Ch.5 - Traditional Essays
- Ch.6 - Transitional Devices
- Ch.7 - Compare/Contrast
- Ch.8 - Persuasive Essay
- Ch.9 - Narrative Essay
- Ch.10 - Listening Comprehension
- Ch.11- Non Verbal Communication
- Ch.12- Familiar Quotes
- Ch.13 - Argumentative Essays
- Ch.14. - Analytical Writing Rubric
- Ch.15 - Short Story
- Ch.16 - Genre
- Ch.17 - Editing
- Ch.18 - Reading Strategies
- Ch.19 - Punctuation Review
- Ch.20 - The Scarlet Letter
- Ch.21 - Descriptive Essay

## English 12



### COURSE DESCRIPTION

- To help students understand the importance of historic context in literary analysis
- To expose students to a variety of literary genres to further their appreciation of literature
- To develop students'½ vocabulary-building skills through the use of context clues and word origin/structure analysis
- To help students recognize and understand the use of a variety of literary elements (terms and techniques)
- To enable students to respond to literature in a way that reflects intelligent and thoughtful analysis
- To help students create a body of written work (essay portfolio) that will facilitate the college application process
- To provide a wide range of learning opportunities, including daily and longer-term projects, in order that students of all ability levels may be able to reach their respective potentials and be successful
- To foster a classroom atmosphere that emphasizes the importance of respect for others'½ opinions, beliefs and ways of being

### CHAPTERS

- Ch.1 - Parts of Speech
- Ch.2 - Sentence Structure
- Ch.3 - Exploring British Literature
- Ch.4 - Anglo-Saxon Era: Beowulf
- Ch.5 - Medieval Period
- Ch.6 - A History of the English Church and People
- Ch.7 - Geoffrey Chaucer
- Ch.8 - The Wife of Bath's Tale
- Ch.9 - The Nun's Priest's Tale
- Ch.10 - The Merchant's Tale
- Ch.11 - Sir Gawain and the Green Knight
- Ch.12 - Le Morte d'Arthur
- Ch.13 - Sentence Patterns
- Ch.14 - Sonnets
- Ch.15 - Drama: Hamlet
- Ch.16 - Macbeth
- Ch.17 - Subject/Verb Agreement
- Ch.18 - Wuthering Heights
- Ch.19 - Romantic Era: Jane Eyre
- Ch.20 - Drama: Antigone
- Ch.21 - Drama: Oedipus Rex

## Honors: English 12



### COURSE DESCRIPTION

- To help students understand the importance of historic context in literary analysis
- To expose students to a variety of literary genres to further their appreciation of literature
- To develop students' vocabulary-building skills through the use of context clues and word origin/structure analysis
- To help students recognize and understand the use of a variety of literary elements (terms and techniques)
- To enable students to respond to literature in a way that reflects intelligent and thoughtful analysis
- To develop students' reading, writing, speaking, listening and critical thinking skills so that they may function effectively in any course at university level
- To help students create a body of written work (essay portfolio) that will facilitate the college application process
- To provide a wide range of learning opportunities, including daily and longer-term projects, in order that students of all ability levels may be able to reach their respective potentials and be successful
- To foster a classroom atmosphere that emphasizes the importance of respect for others' opinions, beliefs and ways of being

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Parts of Speech Review
- Ch.3 - Sentence Structure
- Ch.4 - Drama: Hamlet
- Ch.5 - Drama: Macbeth
- Ch.6 - Anglo-Saxon Era: Beowulf
- Ch.7 - Sentence Patterns
- Ch.8 - Subject/Verb Agreement
- Ch.9 - Wuthering Heights
- Ch.10 - Romantic Era: Jane Eyre
- Ch.11 - Medieval Period
- Ch.12 - Geoffrey Chaucer
- Ch.13 - The Nuns Priests Tale
- Ch.14 - The Merchants Tale
- Ch.15 - Drama: Antigone
- Ch.16 - Drama: Oedipus Rex
- Ch.17 - Course Survey

# Foreign Language

## French I



### COURSE DESCRIPTION

This course emphasizes the development of the four skills of listening, speaking, reading and writing. At level one, students use simple words, expressions and structures to communicate in common, everyday situations. They will be able to formulate simple sentences using proper vocabulary and grammatical structures.

Some of the topics covered in French 1: greetings / likes and dislikes / numbers / time / directions / agreeing / suggestions / ordering food and beverages / invitations / questions / descriptions / permission / phone calls / advice / clothing / family / sports / town / holidays.

### CHAPTERS

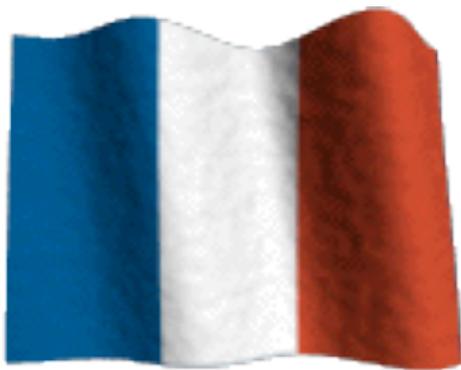
- Ch.1 - Introduction
- Ch.2 - Pronunciation
- Ch.3 - Table des matieres
- Ch.4 - Vowels and Adjectives
- Ch.5 - Weather
- Ch.6 - People
- Ch.7 - Bon Apetit
- Ch.8 - Giving Directions
- Ch.9 - Holidays
- Ch.10 - Where we Live
- Ch.11 - Appendix

### OBJECTIVES

By the end of level one, students will be able to function well in present and near future tenses using simple everyday vocabulary. They will demonstrate knowledge about some of the cultural, social, and geographical features of francophone countries.

*French 1*

## French II



### COURSE DESCRIPTION

This course emphasizes the development of the four skills of listening, speaking, reading and writing. At level one, students use simple words, expressions and structures to communicate in common, everyday situations. They will be able to formulate simple sentences using proper vocabulary and grammatical structures.

Some of the topics covered in French II: greetings / likes and dislikes / numbers / time / directions / agreeing / suggestions / ordering food and beverages / invitations / questions / descriptions / permission / phone calls / advice / clothing / family / sports / town / holidays.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Les fêtes.
- Ch.3 - La Maison
- Ch.4 - Médias
- Ch.5 - Mode, forme et santé.
- Ch.6 - Les études.
- Ch.7 - La vie professionnelle.
- Ch.8 - L'amour et l'argent.

### OBJECTIVES

By the end of level one, students will be able to function well in present and near future tenses using simple everyday vocabulary. They will demonstrate knowledge about some of the cultural, social, and geographical features of francophone countries.

## Spanish I



### COURSE DESCRIPTION

Using a communicative approach Spanish 1 course stresses the fundamentals of pronunciation, grammar, vocabulary, useful phrases and the ability to understand read, write and speak simple Spanish. Basic information about culture and customs of Hispanic Countries will be given.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - The Alphabet
- Ch.3 - Numbers and Introductions
- Ch.4 - Nouns/gender and number
- Ch.5 - Adjectives and "estar"
- Ch.6 - Verb Conjugation/-AR verbs
- Ch.7 - -ER and -IR Verbs and ser
- Ch.8 - Telling time and Irregular Verbs
- Ch.9 - Prepositions and Weather expressions
- Ch.10 - Irregular Verbs and a future tense
- Ch.11 - Gustar, Querer and pasttimes
- Ch.12 - Present Progressive Tense
- Ch.13 - Stem-changing boot verbs
- Ch.14 - Present perfect
- Ch.15 - Objetos directos e indirectos
- Ch.16 - Course Survey
- Ch.17 - Adjetivo posesivo
- Ch.18 - Reflexive verbs and informal commands

### OBJECTIVES

This course stresses the essentials of Spanish and it is to enable the student:

- a) To develop speaking ability and writing skills.
- b) To use Spanish grammar and vocabulary appropriately.
- c) To increase student's readings skills

After completing the course, students will be able to:

- a) Engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions. Understand and interpret written and spoken Spanish on a variety of topics.
- b) Present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- c) Demonstrate an understanding of the practices and perspectives of the Spanish and Hispanic cultures, and make comparisons between these cultures and your own.
- d) Reinforce and further your knowledge of other disciplines (math, science, art, etc.) through the use of Spanish.
- e) Show evidence of becoming a life-long learner by using Spanish for your personal enjoyment and enrichment.

## Spanish II



### COURSE DESCRIPTION

Using a communicative approach Spanish 1 course stresses the fundamentals of pronunciation, grammar, vocabulary, useful phrases and the ability to understand read, write and speak simple Spanish. Basic information about culture and customs of Hispanic Countries will be given.

### CHAPTERS

- Ch.1 - Introduction and review of Spanish 1
- Ch.2 - Present tense verbs review
- Ch.3 - More present tense
- Ch.4 - Past Tense Part 1
- Ch.5 - Past Tense part 2
- Ch.6 - Past Tense Part 3
- Ch.7 - Special verbs with preterite and imperfect
- Ch.8 - Comparing Preterite and Imperfect
- Ch.9 - Grammar Connection
- Ch.10 - Perfect tenses
- Ch.11 - Future Tenses
- Ch.12 - Commands/imperative
- Ch.13 - El condicional
- Ch.14 - Repaso del todos los tiempos
- Ch.15 - Course Survey

### OBJECTIVES

Use of Spanish for communication. This course stresses the essentials of Spanish and it is to enable the student:

- a) To develop speaking ability and writing skills.
- b) To use Spanish grammar and vocabulary appropriately.
- c) To increase student's readings skills

After completing the course, students will be able to:

- a) Engage in conversations, provide and obtain information, express feelings and emotions, and exchange opinions. Understand and interpret written and spoken Spanish on a variety of topics.
- b) Present information, concepts, and ideas to an audience of listeners or readers on a variety of topics.
- c) Demonstrate an understanding of the practices and perspectives of the Spanish and Hispanic cultures, and make comparisons between these cultures and your own.
- d) Reinforce and further your knowledge of other disciplines (math, science, art, etc.) through the use of Spanish.
- e) Show evidence of becoming a life-long learner by using Spanish for your personal enjoyment and enrichment.



## 7th Grade Math



### COURSE DESCRIPTION

This course is designed to assist students as they make the transition between the concrete subject of arithmetic and more abstract subjects like algebra and geometry. This is accomplished by working with variables, variable expressions, equations, inequalities, and formulas. Subjects covered in earlier math courses such as fractions, ratios, percents, exponents, roots, and probability are studied in further depth for greater mastery. The students also explore basic algebraic concepts and skills. The course is taught so that a wide range of abilities is challenged through riddles, puzzles, and more complex mathematical problems supplementing the daily coursework. In addition to the specific arithmetic, algebraic and geometric skills and concepts mentioned above, this course aims to develop students' ability to communicate technical information and mathematical knowledge, which places a heavy emphasis on the processes and reasoning to support answers as well as proper mathematical notation.

### CHAPTERS

- Ch.1 - Welcome To Class
- Ch.2 - Decimal Patterns and Algebra
- Ch.3 - Statistics Analyzing Data
- Ch.4 - Algebra: Integers
- Ch.5 - Algebra Linear Equations and Functions
- Ch.6 - Fractions, Decimals, and Percents
- Ch.7 - Applying Fractions
- Ch.8 - Ratios and Proportions
- Ch.9 - Applying Percentages
- Ch.10 - Probability
- Ch.11 - Geometry and Measurements

## 8th Grade Pre-Algebra



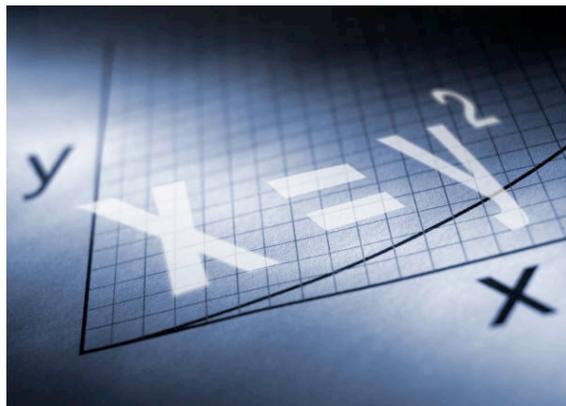
### COURSE DESCRIPTION

8th Grade Pre-Algebra is designed to prepare students for High School Algebra. Coming into 8th Grade Pre-Algebra, students should understand how to do basic operations with decimals, fractions, and mixed numbers. Students should have some understanding of negative numbers. Students should also have a basic understanding of variables and formulas. In this course the students will learn standard math language. They will learn how to do more complex operations with mixed numbers, fractions, and decimals. This may include using exponents and following the order of operations. Students will learn to solve problems using Geometry. They will also learn how to use geometric formulas. Students will also learn how to solve basic equations using addition, subtraction, multiplication, and division.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Language of Math
- Ch.3 - Basic Operations
- Ch.4 - Order of Operations
- Ch.5 - Fractions
- Ch.6 - Multiplying Fractions
- Ch.7 - Decimals
- Ch.8 - Geometric Lines
- Ch.9 - Power and Roots
- Ch.10 - Geometric Formulas
- Ch.11 - Literal Numbers
- Ch.12 - Basic Equations
- Ch.13 - Course Survey

## 9th Grade Pre-Algebra



### COURSE DESCRIPTION

Pre-Algebra. During your long and celebrated years in various math classes, we've found that a solid foundation is extremely important.

In this course, we'll try to clear up some common problems encountered in pre-algebra. We'll cover everything from the basics of equations and graphing to everyone's favorite - fractions.

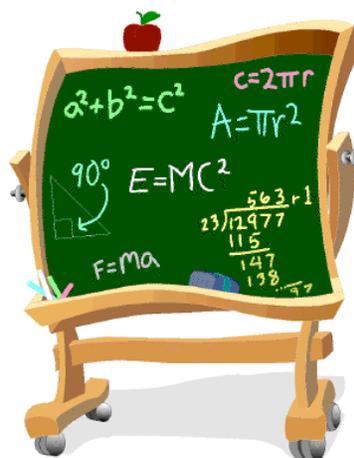
The Basics of Pre-Algebra will be covered in this course which include the following:

Basic Equations: Equations involving addition and/or subtraction. Equations involving multiplication and/or division. Basic Graphing. Fractions: Lowest Common Multiple (LCM). Greatest Common Factor (GCF). Multiplying fractions. Dividing fractions. Common denominators

### CHAPTERS

- Ch.1 Introduction
- Ch. 2 Language of Math
- Ch. 3 Basic Operations
- Ch. 4 Order of Operations
- Ch. 5 Fractions
- Ch. 6 Multiplying Fractions
- Ch. 7 Decimals
- Ch. 8 Geometric Lines
- Ch. 9 Power and Roots
- Ch. 10 Geometric Formulas
- Ch. 11 Literal Numbers
- Ch. 12 Basic Equations

## Algebra I



### COURSE DESCRIPTION

Algebra provides tools and ways of thinking that are necessary for solving problems in a wide variety of disciplines, such as science, business, social sciences, fine arts, and technology. This course will assist students in developing skills and processes to be applied using a variety of techniques to successfully solve problems in a variety of settings.

### CHAPTERS

- Ch 1. - Welcome to Class
- Ch 2. - Properties of Real Numbers
- Ch 3. - Multiplication and Division of Real Numbers
- Ch 4. - Solving One and Two Step Equations
- Ch 5. - More Equations and Word Problems
- Ch 6. - Graphing Linear Equations and Functions
- Ch 7. - Methods of Graphing Equations
- Ch 8. - Writing Linear Equations
- Ch 9. - Forms of Linear Equations
- Ch 10. - Solving Inequalities
- Ch 11. - Solving Systems of Equations
- Ch 12. - Exponents
- Ch 13. - Quadratic Equations and Radicals
- Ch 14. - Polynomials
- Ch 15. - Factoring Polynomials
- Ch 16. - Solving Quadratic Equations
- Ch 17. - Set Theory

## Algebra II

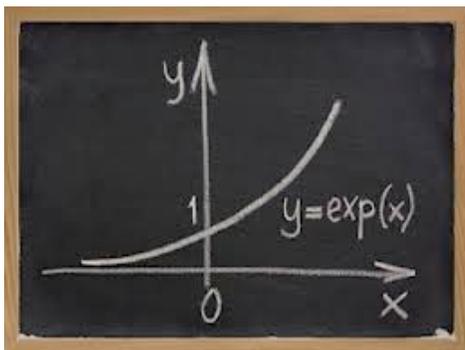
**COURSE DESCRIPTION**

Algebra II is a continuation of the algebraic processes begun in Algebra I. This course includes solving equations, inequalities, matrices, graphing, functions, powers, roots, logarithms, complex numbers, polynomials, quadratic relations, sequences, series, probability and statistics. Appropriate technology is integrated into the curriculum.

**CHAPTERS**

- Ch1. - Introduction
- Ch2. - Integer Exponents
- Ch3. - Scientific Notation
- Ch4. - Radicals
- Ch5. - Rational Exponents
- Ch6. - Polynomials
- Ch7. - Factoring Polynomials
- Ch8. - Simplifying Rational Expressions
- Ch9. - Multiplying / Dividing Rational Expressions
- Ch10. - Adding and Subtracting Rational Expressions
- Ch11. - Complex Rational Expressions
- Ch12. - Complex Numbers
- Ch13. - Test CHAPTERS 2 - 12
- Ch14. - Linear Equation in One Variable
- Ch15. - Equations with Rational Expressions
- Ch16. - Formulas and Applications
- Ch17. - Quadratic Equations
- Ch18. - Solving Polynomial Equations by Factoring
- Ch19. - Radical Equations Involving Rational Exponents
- Ch20. - Equations that are Quadratic in Form
- Ch21. - Absolute Value Equations
- Ch22. - Linear Inequalities
- Ch23. - Quadratic/Rational Inequalities
- Ch24. - Test CHAPTERS 14-23
- Ch25. - Slope of a Line
- Ch26. - Equations of Lines
- Ch27. - Graphing Lines
- Ch28. - Parallel and Perpendicular Lines
- Ch29. - Circles
- Ch30. - Introduction to Functions
- Ch31. - Operations with Functions
- Ch32. - Graphs of Functions, Part I
- Ch33. - Graphs of Functions, Part II
- Ch34. - Test CHAPTERS 15-32

## Honors: Algebra II



### COURSE DESCRIPTION

Algebra II is a continuation of the algebraic processes begun in Algebra I. This course includes solving equations, inequalities, matrices, graphing, functions, powers, roots, logarithms, complex numbers, polynomials, quadratic relations, sequences, series, probability and statistics. Appropriate technology is integrated into the curriculum.

### CHAPTERS

- Ch1. - Introduction
- Ch2. - Integer Exponents
- Ch3. - Scientific Notation
- Ch4. - Radicals
- Ch5. - Rational Exponents
- Ch6. - Polynomials
- Ch7. - Factoring Polynomials
- Ch8. - Simplifying Rational Expressions
- Ch9. - Multiplying / Dividing Rational Expressions
- Ch10. - Adding and Subtracting Rational Expressions
- Ch11. - Complex Rational Expressions
- Ch12. - Complex Numbers
- Ch13. - Test CHAPTERS 2 - 12
- Ch14. - Linear Equation in One Variable
- Ch15. - Equations with Rational Expressions
- Ch16. - Formulas and Applications
- Ch17. - Quadratic Equations
- Ch18. - Solving Polynomial Equations by Factoring
- Ch19. - Radical Equations Involving Rational Exponents
- Ch20. - Equations that are Quadratic in Form
- Ch21. - Absolute Value Equations
- Ch22. - Linear Inequalities
- Ch23. - Quadratic/Rational Inequalities
- Ch24. - Test CHAPTERS 14-23
- Ch25. - Slope of a Line
- Ch26. - Equations of Lines
- Ch27. - Graphing Lines
- Ch28. - Parallel and Perpendicular Lines
- Ch29. - Circles
- Ch30. - Introduction to Functions
- Ch31. - Operations with Functions
- Ch32. - Graphs of Functions, Part I
- Ch33. - Graphs of Functions, Part II
- Ch34. - Test CHAPTERS 15-32

## Consumer Math



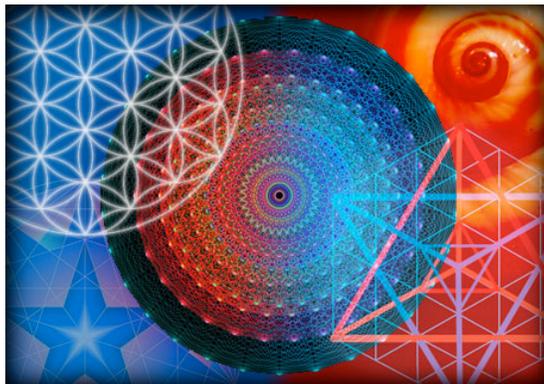
### COURSE DESCRIPTION

In this course students will explore fundamental mathematical concepts such as basic order of operations, real numbers, percent, measurement, calculator usage, fractions, decimals, problem solving, ratios, and proportions. We will cover "real-life" topics such as taxes, personal finance, purchasing, finance, fitness, housing, insurance, transportation and investment. This course features examples in a problem-solving format that allows students to use mathematical skills in consumer situations.

### CHAPTERS

- Ch1. - Welcome to Class
- Ch2. - Earning Money
- Ch3. - Having a Home
- Ch4. - Having an Automobile
- Ch5. - Traveling
- Ch6. - Budgeting Your Money
- Ch7. - Banking and Investing
- Ch8. - Ways to Invest
- Ch9. - Paying Taxes
- Ch10. - Buying Clothes
- Ch11. - Improving Your Home

## Geometry



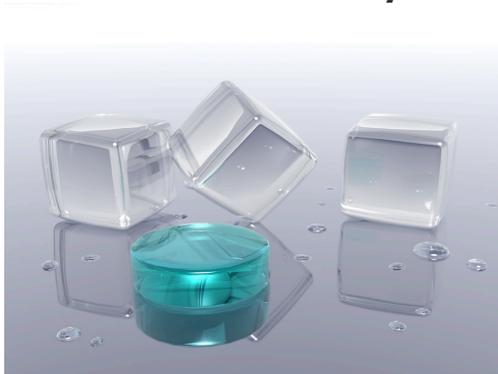
### COURSE DESCRIPTION

The fundamental purpose of the course in Geometry is to formalize and extend students' geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Important differences exist between this Geometry course and the historical approach taken in Geometry classes. For example, transformations are emphasized early in this course. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school CCSS. The Standards for Mathematical Practice apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. The critical areas, organized into five units are as follows.

### CHAPTERS

- Ch1. - Introduction
- Ch2. - Nets and Drawings
- Ch3. - Patterns and Inductive Reasoning
- Ch4. - Lines and Angles
- Ch5. - Congruent Figures
- Ch6. - Midsegments of Triangles
- Ch7. - The Polygon Angle-Sum Theorems
- Ch8. - Ratios and Proportions
- Ch9. - The Pythagorean Theorem
- Ch10. - Translations
- Ch11. - Area of Parallelograms
- Ch12. - Space Figures and Cross Sections
- Ch13. - Tangent Lines

## Honors: Geometry



### COURSE DESCRIPTION

Understanding the following: Points and Lines. The Language and Logic of Geometry. From Reflections to Congruence. Proofs using Congruence. Polygons and Symmetry. Perimeters and Areas. Three-Dimensional Figures. Surface Areas and Volumes

### CHAPTERS

- Ch1. - Nets and Drawings
- Ch2. - Measuring Segments
- Ch3. - Exploring Angle Pairs
- Ch4. - Midpoint and Distance
- Ch5. - Patterns and Inductive Reasoning
- Ch6. - Biconditionals and Definitions
- Ch7. - Reasoning in Algebra and Geometry
- Ch8. - Lines and Angles
- Ch9. - Proving Lines Parallel
- Ch10. - Parallel Lines and Triangles
- Ch11. - Equations of Lines
- Ch12. - Congruent Figures
- Ch13. - Triangle Congruence
- Ch14. - Corresponding Parts of Congruent Triangles
- Ch15. - Congruence in Right Triangles
- Ch16. - Midsegments of Triangles
- Ch17. - Bisectors in Triangles
- Ch18. - Course Survey
- Ch19. - Indirect Proof
- Ch20. - The Polygon Angle-Sum Theorems
- Ch21. - Proving a Quadrilateral
- Ch22. - Conditions
- Ch23. - Polygons in the Coordinate Plane
- Ch24. - Ratios and Proportions
- Ch25. - Proving Triangles Similar
- Ch26. - The Pythagorean Theorem
- Ch27. - Trigonometry
- Ch28. - Translations
- Ch29. - Rotations
- Ch30. - Dilations
- Ch31. - Area of Parallelograms
- Ch32. - Areas of Regular Polygons
- Ch33. - Trigonometry and Area
- Ch34. - Areas of Circles and Sectors
- Ch35. - Space Figures and Cross Sections
- Ch36. - Surface Areas of Pyramids and Cones
- Ch37. - Volumes of Pyramids and Cones



## Statistics



### COURSE DESCRIPTION

#### Section 1: Statistics

An introduction to statistics including an overview and data classification.

Descriptive statistics including frequency distributions, measures of central tendency, variation and position.

Normal probability distributions including standard normal distributions, the central limit theorem, and normal approximations to the binomial distribution.

Confidence intervals for the mean, population proportion and standard deviation.

#### Section 2: Probability

Concepts of probability, including conditional probability, probability rules and counting principles.

Discrete distributions including probability and binomial distributions.

Three examinations are given during the course. Quizzes are at the end of each topic. Use the links page to help offer further definitions and examples.

### CHAPTERS

Ch.1: Independent and Dependent Events

Ch.2: The Next Step...Conditional Probability

Ch.3: Introduction to Discrete Random Variables

Ch. 4: Probability Distributions

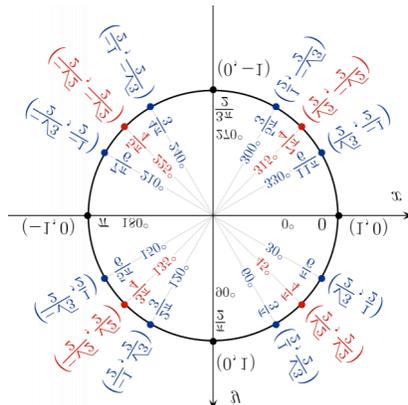
Ch.5: Measures of Central Tendency

Ch.6: Shape, Center and Spread of a Normal Distribution

Ch.7: Organizing and Displaying Distributions of Data

Ch.8: Organizing and Displaying Data for Comparison

## Trigonometry



### COURSE DESCRIPTION

I need all the students to realize that mathematics really cannot be done without pencil and paper in hand. Examples and exercises appear throughout the course which you should attempt to work out alone before checking the answers. To benefit to the fullest, do not look at the solutions before working through problems on your own.

What can you do with trig? Historically, it was developed for astronomy and geography, but scientists have been using it for centuries for other purposes, too. Besides other fields of mathematics, trig is used in physics, engineering, and chemistry. Within mathematics, trig is used primarily in calculus (which is perhaps its greatest application), linear algebra, and statistics. Since these fields are used throughout the natural and social sciences, trig is a very useful subject to know.

### CHAPTERS

- Ch.1: Right Triangle and Intro to Trigonometry
- Ch.2: Graphing Trigonometric Functions
- Ch.3: Trigonometric Identities and Equations
- Ch.4: Inverse Trigonometric Functions
- Ch.5: Triangles and Vectors
- Ch.6: The Polar System

## Music

### Music Appreciation



#### COURSE DESCRIPTION

This course is designed to acquaint students with the elements of music and the primary musical periods of traditional Western European classical music. Students will have a brief overview of the major composers and their music through class lectures, listening to musical examples in class, reading the text, listening to musical examples provided on the student CD's or recordings, actively engaging in class discussions, attending live concerts of suggested performances, and completing research papers and/or oral presentations pertinent to the course material.

#### CHAPTERS

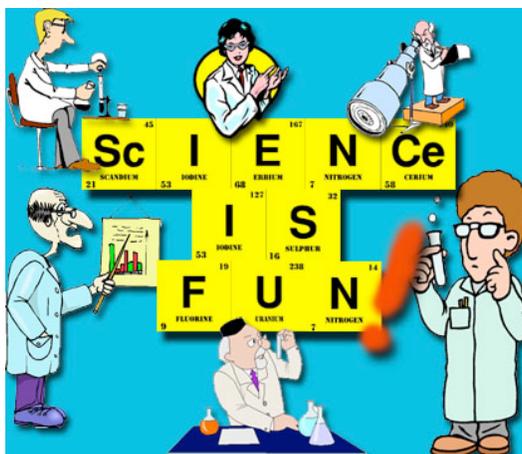
- Ch.1 - Welcome to Class
- Ch.2 - Music Appreciation
- Ch.3 - Elements of Music
- Ch.4 - Elements of Music II
- Ch.5 - Classical Orchestral Music
- Ch.6 - Music for Dance
- Ch.7 - Contemporary Music
- Ch.8 - World Music

#### OBJECTIVES

Demonstrate an understanding of the elements of music and how these elements relate to the compositions presented in class, applying the knowledge of musical styles to composer and composition identification. Apply the course information to future classical music concerts the students may attend, providing an outlet for expression, personal awareness, and aesthetic enlightenment (life-long learning).

# Science

## 6th Grade Science



### COURSE DESCRIPTION

This year long course focuses on extending the scope and sequence from 5th grade science following the state frameworks by promoting solid and accurate content, frequent practice of science process skills (measuring, inferring, hypothesizing, experimenting, observing, and following directions), hands-on activities, computer labs, integration of science concepts across the curriculum, and assessments.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Matter and Its Changes
- Ch.3 - Atoms, Elements & Periodic Table
- Ch.4 - Motions & Forces
- Ch.5 - Energy
- Ch.6 - Electricity and Magnetism
- Ch.7 - Exploring Space
- Ch.8 - Solar System
- Ch.9 - Rocks & Minerals
- Ch.10 - Forces Shaping Earth
- Ch.11 - Weathering and Erosion
- Ch.12 - Cells: The Units of Life
- Ch.13 - Ecology

## 7th Grade Life Science



### COURSE DESCRIPTION

Students in grade seven continue to deepen their knowledge of the life, earth, and physical sciences through more complex investigations and explanations. The concepts they study become increasingly abstract in a developmentally appropriate manner to allow for the slow, incremental development of these cognitively complex ideas. Seventh graders also continue to develop their investigative skills by generating their own questions, recognizing and explaining the relationships among variables, and critiquing the conclusions that are drawn from scientific investigations. Specifically, these students explore the sciences within the framework of the following topics: "The Chemical Nature of Matter" (classifications and properties of matter, changes in matter). "Cells and Heredity" (structure and function of cells and heredity), "Human Body Systems and Disease" (functions and interconnections within the human body and the breakdown of these functions due to disease); and "Ecology: The Biotic and Abiotic Environment" (interactions and responses between biotic and abiotic components and organisms).

### CHAPTERS

- Welcome to Grade 7 Life Science
- Grade 7 Life Science eBook
- Ch1: - Nature of Science/Methods
- Ch2: - Hierarchal Organization of Organisms
- Ch3: - Cells
- Ch4: - Cell Processes
- Ch5: - Meiosis & Mitosis
- Ch6: - Heredity
- Ch7: - Adaptations Over Time
- Ch8: - Bacteria, Protists and Fungi
- Ch9: - Plants
- Ch10: - Photosynthesis and Respiration
- Ch11: - Animals
- Ch12: - Major Body Systems
- Ch13: - Ecology
- Ch14: - Nonliving Environment
- Ch15: - Health

## 8th Grade Earth Science



### COURSE DESCRIPTION

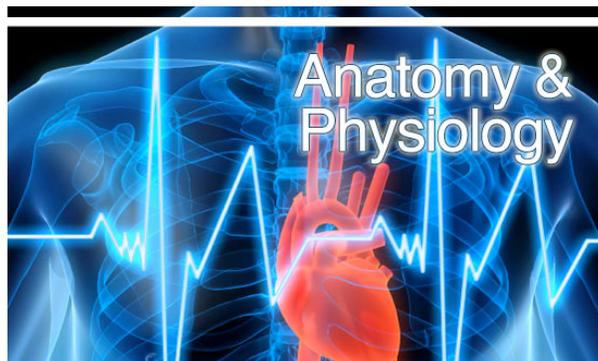
Why is Earth Science important? Earth Science is the study of the rocks and minerals in the earth, and the processes that make them. It explores the processes within the earth that are responsible for Plate Tectonics, the actions of wind and water on the earth, and anticipates changes in the future. Astronomy describes the processes of the planets and stars.

Structure of a dynamic Earth How Earth's Rocks Were Formed Resources and Our Environment Using Maps Effects of Wind, Waves, and Currents Mountains and Plate Tectonics The ocean Earth and the universe The Sun and Its Solar System The Planets and The Solar System Earth's Moon Earth's history.

### CHAPTERS

- Ch.1 - Welcome to Earth Science!
- Ch.2 - Overview of Earth Science
- Ch.3 - The Earth's Dimensions
- Ch.4 - Map Reading
- Ch.5 - Shaping Earth
- Ch.6 - Geologic Times
- Ch.7 - Rock Types
- Ch.8 - Unit 1 Test
- Ch.9 - Faults
- Ch.10 - Solar System
- Ch.11 - The Moon
- Ch.12 - Plate Tectonics
- Ch.13 - Volcanoes
- Ch.14 - Earthquakes
- Ch.15 - Mid-Term Review
- Ch.16 - Water Cycle
- Ch.17 - Glaciers
- Ch.18 - Surface Water
- Ch.19 - Minerals
- Ch.20 - Projects
- Ch.21 - Sediments
- Ch.22 - Weathering
- Ch.23 - Clay Minerals/Soil
- Ch.24 - Caves
- Ch.25 - People
- Ch.26 - Air
- Ch.27 - Atmospheric Pressure
- Ch.28 - Energy
- Ch.29 - Evaporation
- Ch.30 - 3rd Test Review
- Ch.31 - Oceanography
- Ch.32 - Final Exam
- Ch.33 - Course Survey

## Anatomy/Physiology



### DESCRIPTION

This course provides basic foundation knowledge of human anatomy and physiology of the ten body systems and their organs required for students in an allied health administrative curriculum. Understanding medical language will focus on learning the anatomy word roots/combining forms and common medical prefixes and suffixes. With knowledge of the word components, the student will be able to define and understand medical words including diagnostic, laboratory, and medical specialties.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - The Human Body
- Ch.3 - Basic Chemistry
- Ch.4 - Cells and Tissues
- Ch.5 - Skin and Body Membranes
- Ch.6 - The Skeletal System
- Ch.7 - The Muscular System
- Ch.8 - The Nervous System
- Ch.9 - Special Senses
- Ch.10 - The Endocrine System
- Ch.11 - Blood
- Ch.12 - The Cardiovascular System
- Ch.13 - The Lymphatic System
- Ch.14 - The Respiratory System
- Ch.15 - The Digestive System
- Ch.16 - The Urinary System
- Ch.17 - The Reproductive System

### OBJECTIVES

The students will understand concepts dealing with the nature of science. The students will understand concepts of the diversity of life. The students will understand concepts of heredity. The students will understand concepts of cells.

## Astronomy



### DESCRIPTION

Welcome to Astronomy. By selecting a class in astronomy, you have chosen the oldest and arguably the most visually beautiful of the sciences. It is a unique science in that virtually all of the discoveries in astronomy have been made through indirect means. Other than the Earth (and a few items from space which have fallen onto it), the Moon is the only place that humankind has physically touched.

There have been remote soil sample tests done on the Viking mission to Mars and probes, such as Voyager, have been sent to the outer reaches of the solar system, but none of these missions have returned any material for human hands to touch.

Yet, remarkably, astronomers are still able to make very accurate measurements of the cosmos. In this course, you will learn that current theories in astronomy are based on a solid mathematical foundation corroborated at times by data seen in the electromagnetic spectrum. The ingenious methods that great minds, past and present, have used to advance our knowledge of the universe are amazing.

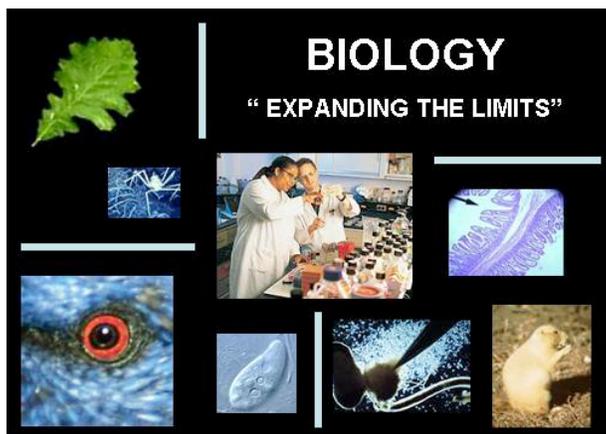
This class will appeal to both the casual stargazer and to the stargazer who has a more in-depth interest in the fascinating, sometimes inconceivable, phenomena that occur throughout space.

This course introduces you to the composition and structure of the universe. We begin with the night sky and some of the tools of astronomy. We also explore the history of astronomy, to give you an understanding of the foundation on which the theories of astronomy have been built. With this basic background information, you will then tour the universe, beginning with our own solar system, and working your way out to the farthest reaches of deep space (2nd semester).

### CHAPTERS

- Ch.1 - Welcome To Astronomy
- Ch.3 - The Journey Begins
- Ch.4 - Latitude and Longitude
- Ch.5 - Keplers Law
- Ch.6 - Newtonian Mechanics
- Ch.7 - The Sun and related Physics
- Ch.8 - Spaceflight and Spacecraft
- Ch.9 - Course Survey

## Biology



### DESCRIPTION

The Biology course incorporates new perspectives and understanding across major sub-disciplines of biology. Genetics, cell biology, development, behavior and immunology are some of the areas covered. The concept of evolution is seen as the central organizing theme of biology. The focus of the course is on molecular biology.

As an introductory course in biology, students are prepared for college and advanced placement courses. Students will be sensitized to various moral and environmental issues being brought to the fore by research in bioengineering and other areas of biological research. They will be provided with tools with which to make educated decisions regarding these new technologies and developments.

### CHAPTERS

- Welcome to Biology
- Unit 1: What is Biology?
- Unit 2: The Chemistry of Life
- Unit 3: Cellular Structure and Function
- Unit 4: Photosynthesis and Cellular Respiration
- Unit 5: The Cell Cycle, Mitosis, and Meiosis
- Unit 6: Gregor Mendel and Genetics
- Unit 7: Molecular Genetics: From DNA to Proteins
- Unit 8: Human Genetics and Biotechnology
- Unit 9: Life From the First Organism Onward
- Unit 10: The Theory of Evolution
- Unit 11: The Principles of Ecology
- Unit 12: Communities and Populations
- Unit 13: Microorganisms: Prokaryotes and Viruses
- Unit 14: Eukaryotes: Protist and Fungi
- Unit 15: Plant Evolution and Classification
- Unit 16: Plant Biology
- Unit 17: Introduction to Animals
- Unit 18: From Sponges to Invertebrate Chordates
- Unit 19: From Fishes to Birds
- Unit 20: Mammals and Animal Behavior
- Unit 21: Introduction to the Human Body
- Unit 22: The Nervous and Endocrine Systems
- Unit 23: The Circulatory, Respiration, Digestive, and Excretory Systems
- Unit 24: The Immune System and Disease
- Unit 25: Reproduction and Human Development

## Honors: Biology



### COURSE DESCRIPTION

The Biology course incorporates new perspectives and understanding across major sub-disciplines of biology. Genetics, cell biology, development, behavior and immunology are some of the areas covered. The concept of evolution is seen as the central organizing theme of biology. The focus of the course is on molecular biology.

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### CHAPTERS

- Ch.1 - Introduction to Biology Honors
- Ch.2 - Scientific Methods
- Ch.3 - Basic Chemistry
- Ch.4 - Water
- Ch.5 - Carbon Chemistry
- Ch.6 - Four Macromolecules
- Ch.7 - Cell Structure and Function
- Ch.8 - Cell Membrane
- Ch.9 - The Living Cells
- Ch.10 - Inside the Cell
- Ch.11 - Cell Movement
- Ch.12 - Cell Division
- Ch.13 - Cells and Chemistry
- Ch.14 - Cells and Energy
- Ch.15 - Photosynthesis
- Ch.16 - Cell Respiration
- Ch.17 - Chromosomes
- Ch.18 - Genetic Disorder
- Ch.19 - Gene Expression

## Botany



### DESCRIPTION

In this course you will learn the identification, distribution, and interrelationships of plants in their natural environment, ecological principles, and representative plant communities. Special emphasis will be given to the study of plant families and the use of taxonomic keys.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Why Study Plants
- Ch.3 - The Molecules that Make a Plant
- Ch.4 - The Plant Cell
- Ch.5 - From Seed to Sprout
- Ch.6 - Plant Cells and Tissues
- Ch.7 - Plant Organs
- Ch.8 - Plant Organs II
- Ch.9 - Plant Organs III
- Ch.10 - Systematics and Taxonomy
- Ch.11 - Protists and Other Beasts
- Ch.13 - The Bryophytes
- Ch.14 - The Seedless Tracheophytes
- Ch.15 - The Gymnosperms
- Ch.16 - The Angiosperms: Introduction
- Ch.17 - The Angiosperms: Evolution
- Ch.18 - Internal Regulation
- Ch.19 - Response to the Environment
- Ch.20 - Plant Nutrition and Soil

### OBJECTIVES

- Upon completion of this course, the successful student will be able to:
1. recognize and identify the common flowering plants (including native and naturalized herbs/grasses, trees and shrubs) of our local mountains, desert, coastal marshlands, and vacant fields using a dichotomous taxonomic key (regional flora);
  2. compare and contrast the basic types of vegetative and reproductive anatomy, including leaves, stems, roots, flowers and fruits;
  3. compare and contrast the mechanisms of pollination, including wind, water and insect pollination;
  4. discuss phylogenetic trees at several taxonomic hierarchical levels using cladistical analysis of morphology and DNA sequencing;
  5. apply the basic techniques of vegetation analysis.

## Chemistry I



### DESCRIPTION

Why is Chemistry important? All things are made up of atoms, and atoms behave in predictable ways. If you know the name of an element from the Periodic table, you can predict the characteristics of that element: the mass, what state the atoms are in, and how they will react with other atoms. Why did the Hindenburg explode, while the Goodyear blimp never does? How do Forensic Chemists determine that someone was poisoned? How does Ozone form, and why is it important? All these are covered in Chemistry.

It is going to be extremely important when going through the course material that you take notes. You will venture many sites outside of our school for further explanation and detail for the lesson you are covering. When you click on the link and it takes you to another website, you will be responsible for the information that is on the link.

Chemistry has to be studied to be understood. It is not a course that can be merely read, so take your time as you do each lesson. It is often a good idea to go over each lesson at least 3 times. The first time allows you to become oriented with the subject matter and ideas that are introduced. The second time should be when you study each part intently, focusing on any concepts that you may not understand. The third time you read a lesson should be a review of the key concepts and formulas. It is a good idea to review previous lessons frequently as the course progresses.

Each lesson will have questions provided as a review at the end. In addition, there will be links to other sites that are particularly helpful for further study or to gain more understanding of a particular subject.

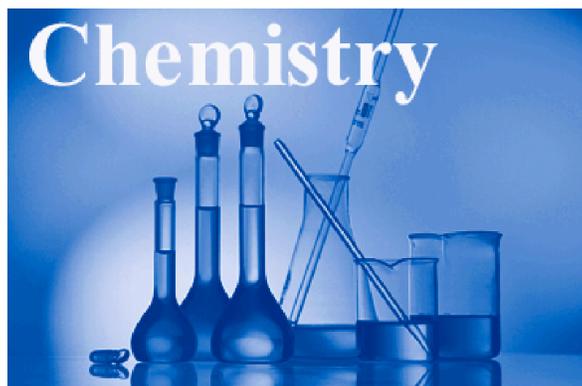
Chemistry is the study of matter and its changes. Through the study of Chemistry, learners are given an opportunity to explore and understand the natural world and to become aware of the profound influence of chemistry in their lives. Chemistry, as with all sciences, is an experimental discipline requiring creativity and imagination. Methods of inquiry characterize its study. In Chemistry, students further develop their ability to ask questions, investigate and experiment; to gather, analyze and assess scientific information; and to test scientific laws and principles and their applications. In the process, students exercise their creativity and develop their critical thinking skills. Through experimentation and problem solving activities that include the integration of technology and independent study, students develop an understanding of the process by which scientific knowledge evolves. Students are active learners and will assume increased responsibility for their learning as they work throughout the program. Students are expected to participate actively in their own learning.

### CHAPTERS

- Ch.1 - Welcome to Chemistry!
- Ch.2 - Chemistry Overview
- Ch.3 - International System of Measurement
- Ch.4 - 5 Step Problem Solving
- Ch.5 - Percent Error
- Ch.6 - Atomic Structure
- Ch.7 - Periodic Tables
- Ch.8 - Elemental Notations

- Ch.9 - Lewis Dot Diagram
- Ch.10 - Bonding & Molecular Structure
- Ch.11 - Chemical Formulas
- Ch.12 - Writing Chemical Formulas
- Ch.13 - Molecular and Empirical
- Ch.14 - States of Matter
- Ch.15 - Gases
- Ch.16 - Charles Law
- Ch.17 - Graham's Law
- Ch.18 - Chemical Reactions
- Ch.19 - Stoichiometry
- Ch.20 - Mass Problems
- Ch.21 - Mixed Mass Volume
- Ch.22 - Volume Problem
- Ch.23 - Chemical Equilibrium
- Ch.24 - Acids & Bases
- Ch.25 - Salt Solubility
- Ch.26 - The pH Scale
- Ch.27 - Course Survey

## Honors: Chemistry



### COURSE DESCRIPTION

Welcome to Chemistry, the Science concerned with the study of matter. You are beginning the study of one of the most interesting subjects that you will ever come across. As is the case with all subjects, what you will get out of Chemistry will depend upon what you put into it. Chemistry can intrigue and enlighten you or it can confound and frustrate you. It all depends upon the effort you are willing to put into your studies. If you keep an open mind, and listen to your teacher, a course in Chemistry will change the way you view the world.

Chemistry is a skill-based course, and many of the most important lessons will come in the first few weeks. You must start off with good study habits from the very beginning, or you risk falling behind. Unfortunately, some students who start off slow wind up becoming frustrated early on. They fail to develop the natural love for the subject that comes to those who work at it.

### CHAPTERS

- Ch.1 - Chemistry Overview
- Ch.2 - International System of Measurement
- Ch.3 - 5 Step Problem Solving
- Ch.4 - Percent Error
- Ch.5 - Atomic Structure
- Ch.6 - Periodic Tables
- Ch.7 - Elemental Notations
- Ch.8 - Lewis Dot Diagram
- Ch.9 - Bonding & Molecular Structure
- Ch.10 - Chemical Formulas
- Ch.11 - Writing Chemical Formulas
- Ch.12 - Molecular and Empirical
- Ch.13 - States of Matter
- Ch.14 - Gases
- Ch.15 - Charles Law
- Ch.16 - Grahams Law
- Ch.17 - Chemical Reactions
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- Ch.19 - Mass Problems
- Ch.20 - Mixed Mass Volume
- Ch.21 - Volume Problem
- Ch.22 - Chemical Equilibrium
- Ch.23 - Acids & Bases
- Ch.24 - Salt Solubility
- Ch.25 - The pH Scale

## Environmental Science



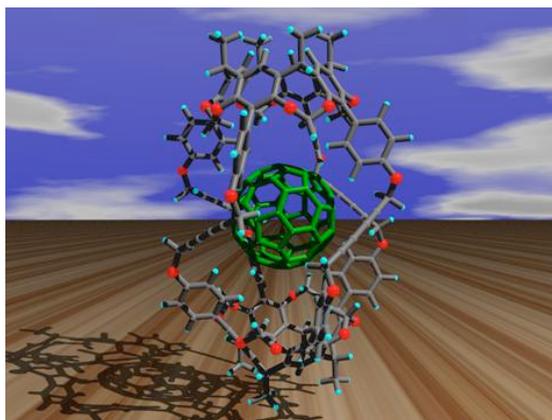
### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Sustainability, Stewardship, Social Science
- Ch.3 - Ecosystems: Units of Sustainability
- Ch.4 - Ecosystems: How They Work
- Ch.5 - Ecology: Population and Succession
- Ch.6 - Ecosystems and Evolutionary Change
- Ch.7 - Demographics
- Ch.8 - Addressing the Population Problem
- Ch.9 - Soil and the Soil Ecosystem
- Ch.10 - Hydrologic Cycle and Human Use
- Ch.11 - Production and Distribution of Food
- Ch.12 - Biodiversity and Protection
- Ch.13 - Ecosystems as Resources
- Ch.14 - Energy from Fossil Fuels
- Ch.15 - Nuclear Power
- Ch.16 - Renewable Energy
- Ch.17 - Course Survey

### OBJECTIVES

1. Biodiversity and Conservation
  - Define biological diversity and distinguish among genetic diversity, species richness, and ecosystem diversity.
  - Relate several important ecosystem services provided by biological diversity.
  - Define extinction and distinguish between background extinction and mass extinction.
  - Contrast threatened and endangered species, and list characteristics common to many endangered species.
  - Define biodiversity hotspots and explain where most of the world's biodiversity hotspots are located.
  - Describe human causes of species endangerment and extinction.
  - Explain how invasive species endanger native species.
  - Briefly describe the benefits and shortcomings of the U.S. Endangered Species Act.
2. Human Population, Agriculture, Biotechnology, and the Future of Food
  - Relate carrying capacity to agricultural productivity.
  - Define food insecurity and relate human population to world hunger.

## Inorganic Chemistry



### DESCRIPTION

Chemistry comprises two related but distinct activities:

(I) The quest for an understanding of matter and material change,

(II) The utilization of material change for human ends.

Ideally, the first activity provides the necessary know-how for the pursuit of the second, but in practice, the help it can give is only partial, and the second activity has to fall back on trial and error techniques in order to achieve its ends. This means that a good chemist is one who not only has a mastery of chemical theory, but also a good knowledge of chemical facts. With such a knowledge he can direct a trial-and-error approach to practical problems in the most promising directions.

Organic chemistry is usually defined as the chemistry of compounds of carbon, inorganic chemistry being then the chemistry of all the other elements. This distinction is not a completely satisfactory one, however, since there are many compounds of carbon that are quite different from those studied by organic chemists (e.g. tungsten carbide, used for tipping cutting tools) and there are many compounds of other elements that are very similar to those studied under organic chemistry (e.g. the silicon analogues of the hydrocarbons). It is best, therefore, to think of inorganic chemistry as the chemistry of all the elements, with organic chemistry as being a more detailed study of certain important aspects of one of them - viz. the hydrocarbons and their derivatives.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Inorganic Chemistry
- Ch.3 - Relative Importance of Different Elements
- Ch.4 - Classification of Elements
- Ch.5 - Binary Compounds
- Ch.6 - Limiting Types of Binary Compounds
- Ch.7 - Types of Formula
- Ch.8 - Classification of Elements
- Ch.9 - Valency
- Ch.10 - Pseudo-binary Compounds
- Ch.11 - The Periodic Table
- Ch.12 - Interpretation of Main-group Valencies
- Ch.13 - Compounds of Higher Order than Two
- Ch.14 - Coordination Compounds
- Ch.15 - Loose Compounds and Solutions
- Ch.16 - Types of Chemical Reaction
- Ch.17 - Acids, Bases, and Salts
- Ch.18 - Oxidation and Reduction

## Physical Science



### DESCRIPTION

This course is an introduction to some of the principles of energy and motion, the nature of matter, the interaction of matter, light and sound and electricity.

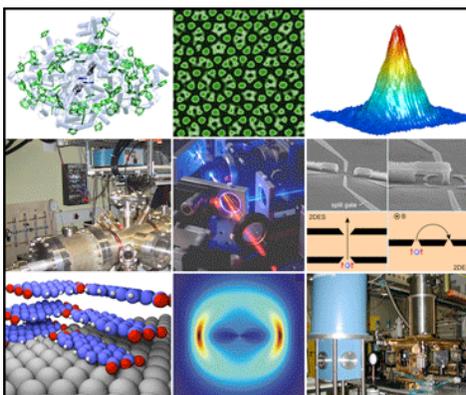
### CHAPTERS

- Welcome to Physical Science
- Ch.1 - Energy and Motion
- Ch.2 - Electricity and Energy Resources
- Ch.3 - Energy on the Move
- Ch.4 - The Nature of Matter
- Ch.5 - Diversity of Matter
- Ch.6 - Interactions of Matter
- Ch.7 - Course Survey

### OBJECTIVES

1. To become balanced individuals through the harmonious development of the spiritual, mental, physical, and social faculties.
2. Cultivate the social graces exhibited by Christian ladies and gentlemen.
3. Appreciate the principle of work well done in exchange for wages.
4. Choose occupations that will make them effective citizens.
5. Develop skills in working well with other people.
6. Accept the responsibilities of good citizenship, exercising self-government, respect for law and order, intelligent use of the democratic process.
7. Develop an understanding and appreciation of the arts and sciences.
8. Acquire an appreciation for God's handiwork.

## Physics



### DESCRIPTION

This course is an introduction to physics involving a study of motion, forces, conservation laws, heat, entropy, electricity, magnetism, waves, relativity and quantum theory. The cultural aspects of physics and the scientific method will be included. This course is for students who have had no previous physics, including high school physics. (The course cannot be used by natural science majors to satisfy degree requirements.)

### CHAPTERS

- Ch.1 - Welcome to Physics!
- Ch.2 - Kinematics
- Ch.3 - Describing Motion with Diagrams
- Ch.4 - Motion with Position vs. Time Graphs
- Ch.5 - Velocity vs. Time Graphs
- Ch.6 - Free Fall and Acceleration of Gravity
- Ch.7 - The Kinematics Equations
- Ch.8 - Assignment Chapter 1-7
- Ch.9 - Newton's Laws
- Ch.10 - Force and Its Representation
- Ch.11 - Newton's Second Law
- Ch.12 - Newton's Third Law of Motion
- Ch.13 - Assignment Chapter 9-13
- Ch.14 - Vectors
- Ch.15 - Projectile Motion
- Ch.16 - Forces in Two Dimensions
- Ch.17 - Assignment Chapter 14-16
- Ch.18 - Momentum/Conservation
- Ch.19 - The Law of Momentum Conservation
- Ch.20 - Assignment Chapter 18-19
- Ch.21 - Work, Energy, and Power
- Ch.22 - Internal vs. External Forces
- Ch.23 - Assignment Chapter 21-22
- Ch.25 - Circular Motion and Planetary Motion
- Ch.26 - Newton's Second Law - Revisited
- Ch.27 - Universal Gravitation
- Ch.28 - Planetary and Satellite Motion
- Ch.29 - Assignment Chapter 24-27
- Ch.30 - Waves
- Ch.31 - Anatomy of a Wave
- Ch.32 - Behavior of Waves
- Ch.33 - Reflection, Refraction, and Diffraction

- Ch.34 - Standing Waves
- Ch.35 - Assignment 29-34
- Ch.36 - Sound Waves and Music
- Ch.37 - Sound Properties and Perception
- Ch.38 - Behavior of Sound Waves
- Ch.39 - Resonance and Standing Waves
- Ch.40 - Musical Instruments
- Ch.41 - Assignment Chapter 35-39
- Ch.42 - Light Waves and Color
- Ch.43 - Color and Vision
- Ch.44 - Assignment Chapter 41-42
- Ch.45 - Ray Model of Light
- Ch.46 - Image Formation in Plane Mirrors
- Ch.47 - Concave Mirrors
- Ch.48 - Convex Mirrors
- Ch.49 - Assignment Chapter 44-47
- Ch.50 - Refraction/Ray Model of Light
- Ch.51 - Mathematics of Refraction
- Ch.52 - Total Internal Reflection
- Ch.53 - Image Formation by Lenses
- Ch.54 - Anatomy of the Eye
- Ch.55 - Assignment Chapter 49-53
- Ch.56 - Course Survey

## Zoology



### COURSE DESCRIPTION

Zoology is the study of animal life. Zoologists research everything they think to ask about animals, including their anatomy and interrelationships, their physiology and genetics, their distributions and habitats. Human beings have been zoologists for as long as there have been human beings. As humans, we are intricately tied to animal life - we've depended on many of them for food, work, and friendship throughout our evolution and history....not to mention that we ARE animals!

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Animal Identification
- Ch.3 - Phylogeny
- Ch.4 - Population Ecology
- Ch.5 - Communities & Ecosystems
- Ch.6 - Cnidaria and Worms
- Ch.7 - Phyla Mollusca and Annelida
- Ch.8 - Phylum Arthropoda
- Ch.9 - Phylum Chordata
- Ch.10 - Freshwater Fish
- Ch.11 - Class Amphibia
- Ch.12 - Lizards and Turtles
- Ch.13 - Snakes
- Ch.14 - Class Aves
- Ch.15 - Class Mammalia
- Ch.16 - Course Survey

## Social Studies

### 6th Grade Social Studies



#### COURSE DESCRIPTION

Sixth Grade Social Studies is a study of the patterns and interactions of countries in the Western Hemisphere. Students will determine information about people, places, and environment through the use and construction of geography tools. From an understanding of the physical and human characteristics of places, students will study the effects of the interaction between human and physical systems. With an emphasis on resource distribution and use, they will determine how economic, political, cultural, and social processes interact to shape patterns of human populations, interdependence, cooperation, and conflict. This course builds a secondary-level foundation of global awareness, economic literacy, and civic literacy in order to address complex global issues. The 21st century skills of critical thinking, problem solving, communication, collaboration, and cross-cultural understanding will be emphasized throughout the course.

#### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - North America
- Ch.3 - Canada
- Ch.4 - Mexico
- Ch.5 - Central America & West Indies
- Ch.6 - South America
- Ch.7 - Andean Countries
- Ch.8 - Europe: Early History
- Ch.9 - Europe: Modern History
- Ch.10 - Western Europe
- Ch.11 - Eastern Europe
- Ch.12 - Russia

## 7th Grade Social Studies



### **COURSE DESCRIPTION**

This class is an overview of U.S. History from pre-history until current times. The class is taught in two sections, with pre-history through 1850 and the U.S. Constitution in one section and 1850 through today in the second section. Students study primary and secondary historical documents, use problem solving skills, analyze data, make predictions and draw conclusions about historical events and people throughout time.

### **CHAPTERS**

- Ch.1 - Introduction
- Ch.2 - Unit 1: Different Worlds Meet
- Ch.3 - Unit 1: Exploring the Americas
- Ch.4 - Unit 2: Colonial America
- Ch.5 - Unit 2: The Colonies
- Ch.6 - Unit 3: Road to Independence
- Ch.7 - Unit 3: The American Revolution
- Ch.8 - Unit 3: A More Perfect Union
- Ch.9 - Unit 4: The New Republic
- Ch.10 - Unit 4: The Jefferson Era
- Ch.11 - Unit 4: Growth and Expansion
- Ch.12 - Unit 5: The Jackson Era
- Ch.13 - Unit 5: Manifest Destiny
- Ch.14 - Unit 5: The North and South
- Ch.15 - Unit 5: The Age of Reform

## 8th Grade Civics



### COURSE DESCRIPTION

This course explores what it means to be an informed, participating citizen in a democratic society. Students will learn about the elements of democracy in local, national, and global contexts, about political reactions to social change, and about political decision-making processes in Canada. They will explore their own and others' ideas about civics questions and learn how to think critically about public issues and react responsibly to them.

### CHAPTERS

- Ch1. - Welcome to Class
- Ch2. - Introducing Government in America
- Ch3. - The Constitution
- Ch4. - Federalism
- Ch5. - Civil Liberties and Public Policy
- Ch6. - Civil Rights and Public Policy
- Ch7. - Opinion and Political Action
- Ch8. - Political Parties
- Ch9. - Nominations and Campaigns
- Ch10. - Elections and Voting Behavior
- Ch11. - Interest Groups
- Ch12. - Congress
- Ch13. - The Presidency
- Ch14. - Congress, President, and the Budget
- Ch15. - The Federal Bureaucracy
- Ch.16 - The Federal Courts

## American Government



### COURSE DESCRIPTION

The Government course is a thought-provoking exploration of American Government and Politics. We will cover such topics as the Constitution, civil rights, interest groups, politics, voting, Congress, the Presidency, the Judiciary, laws, public policies, state & local government, and current events.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Political Landscape
- Ch.3 - Political Philosophy
- Ch.4 - Historical Documents
- Ch.5 - The Constitution
- Ch.6 - Federalism
- Ch.7 - State and Local Government
- Ch.8 - Civil Liberties
- Ch.9 - Civil Rights
- Ch.10 - Congress
- Ch.11 - National vs. State Government
- Ch.12 - The Presidency
- Ch.13 - The Bureaucracy
- Ch.14 - The Judiciary
- Ch.15 - Public Opinion?
- Ch.16 - Political Parties
- Ch.17 - Voting & Elections
- Ch.18 - Election Process
- Ch.19 - The Campaign Process
- Ch.20 - News Media
- Ch.21 - Citizenship
- Ch.22 - Continuity & Change
- Ch.23 - Final Exam
- Ch.24 - Course Survey

### OBJECTIVES

(1) To have the students learn about American Government; (2) To have the students acquire all the skills listed in the "Philosophy" section above; (3) To have students demonstrate their knowledge and skills throughout their High School experience when Political issues and stance can be understood and discussed intelligently.

## American History



### COURSE DESCRIPTION

This course examines the major turning points in American history beginning with the events leading up to the American Revolution, the origins of our constitution, reform movements, Manifest Destiny, the Civil War and Reconstruction, the impact of the frontier, the changing nature of business and government, World War I, the Great Depression, World War II, the growth of the United States as a world power, the Cold War and the struggle to achieve class, ethnic, racial, and gender equality. The course extends to the modern day. Contemporary world issues such as globalization, economic interdependence, terrorism and world cultures will also factor into our analysis of international conflict and cooperation. The California state standards provide both the framework and pace of this class. The curriculum and academic expectations will be differentiated to accommodate gifted and highly motivated students.

### CHAPTERS

- Ch 1. - Introduction
- Ch 2. - The American Pageant
- Ch 3. - Colonialism in North America
- Ch 4. - The American Pageant II
- Ch 5. - Bacon Rebellion
- Ch 6. - The Roots of Revolution
- Ch 7. - Constitution Making in the States
- Ch 8. - Unit 1 Test
- Ch 9. - The American Pageant III
- Ch 10. - The Continental Congress
- Ch 11. - Politics for the People
- Ch 12. - Democracy
- Ch 13. - Unit 2 Test
- Ch 14. - Romanticism in America
- Ch 15. - Political Triumphs
- Ch 16. - Destiny
- Ch 17. - Farewell to Union
- Ch 18. - Mobilizing for War
- Ch 19. - Unit 3 Test
- Ch 20. - Reconstruction
- Ch 21. - Industrial Expansion 1860-1890
- Ch 22. - The Taking of the West
- Ch 23. - Immigrants, Women Reformers
- Ch 24. - Unit 4 Test
- Ch 25. - The Progressive Era

- Ch 26. - The Gilded Age (1890) to World War I
- Ch 27. - Spanish American War
- Ch 28. - 1920 to 1940
- Ch 29. - The New Deal
- Ch 30. - Eisenhower
- Ch 31. - John F. Kennedy
- Ch 32. - Presidents 1976-1996
- Ch 33. - The 1980's
- Ch 34. - Reagan Revolution
- Ch 35. - Rap Music/White Fears
- Ch 36. - Gilded Age
- Ch 37. - Into the 21st Century
- Ch 38. - Post Cold War
- Ch 39. - Three Strikes

## Honors: American History



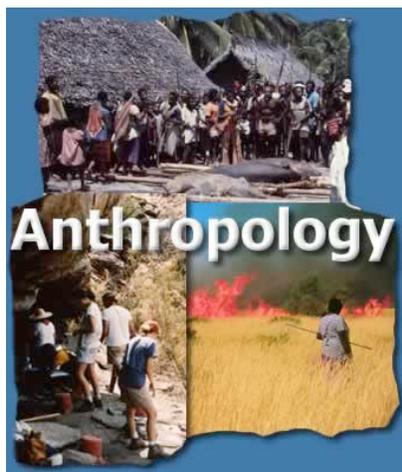
### COURSE DESCRIPTION

This course examines the major turning points in American history beginning with the events leading up to the American Revolution, the origins of our constitution, reform movements, Manifest Destiny, the Civil War and Reconstruction, the impact of the frontier, the changing nature of business and government, World War I, the Great Depression, World War II, the growth of the United States as a world power, the Cold War and the struggle to achieve class, ethnic, racial, and gender equality. The course extends to the modern day. Contemporary world issues such as globalization, economic interdependence, terrorism and world cultures will also factor into our analysis of international conflict and cooperation. The California state standards provide both the framework and pace of this class. The curriculum and academic expectations will be differentiated to accommodate gifted and highly motivated students.

### CHAPTERS

- Ch.1 - Early America
- Ch.2 - The Colonial Period
- Ch.3 - Road to Independence
- Ch.4 - National Government
- Ch.5 - Westward Expansion
- Ch.6 - Sectional Conflict
- Ch.7 - Growth and Transformation
- Ch.8 - Discontent and Reform
- Ch.9 - War, Prosperity & Depression
- Ch.10 - The New Deal and World War
- Ch.11 - Post War America
- Ch.12 - Decades of Change
- Ch.13 - Towards the 21st Century
- Ch.14 - Final Exam

## Anthropology



### COURSE DESCRIPTION

Anthropology is the study of humans, past and present. This course is designed for you to study the origin and development of human beings and their culture. The word anthropology is derived from two Greek words: anthropos meaning "man" or "human" and logos, meaning "thought" or "reason." You will study the four basic subsistence patterns anthropologists have broken the science into. You will also study various other factors such as kinship, socialization, religion, cultural change, and much more. Please read through the content as it will be beneficial in applying the knowledge during the course. Good luck with your studies!

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Human Culture
- Ch.3 - Language and Culture
- Ch.4 - Patterns of Subsistence
- Ch.5 - Economic Systems
- Ch.6 - Social Organization
- Ch.7 - Kinship
- Ch.8 - Sex and Marriage
- Ch.9 - Process of Socialization
- Ch.10 - Ethnicity and Race
- Ch.11 - Political Organization
- Ch.12 - Social Control
- Ch.13 - Anthropology of Religion
- Ch.14 - Medical Anthropology
- Ch.15 - Culture Change
- Ch.16 - Course Survey

## Economics



### COURSE DESCRIPTION

Interest and concern with economic issues top virtually every public opinion poll, but Gallup polls show an appalling lack of understanding of underlying economic concepts. The lack of economic literacy isn't surprising. Seven out of ten adults in a recent survey stated that they had never had economics instruction in high school. Yet, of high school students interviewed in the survey, half reported taking steps in the previous six months to learn more about how our economy works. In addition, virtually all of those interviewed thought more economics ought to be taught in the nation's schools. The National Council for the Social Studies recommends that all high school students take a course in economics before graduation. Nearly half of the states have just such a requirement. The new state standards for high school graduation includes testing on knowledge and skills in economics.

This economics course has two primary objectives. First of all, the class is designed to provide students with an overview of business, finance, banking, investment, government's role in the economic system, labor-management relations, foreign trade, income inequality, and related fields. The knowledge and skills acquired will help the student make career decisions and make wise choices for further study at a college or vocational school. Students will gain insights into the advantages, disadvantages, and strategies of starting a business of one's own.

The second major objective of the course is to provide each student with the knowledge and skills to do very well in any college or vocational school economics course. At least two courses in economics are required for most business majors and a host of non-business majors.

The course particularly appealing to students who are interested in history, math, or contemporary issues. The course is designed for all students to be successful. For individuals wishing to prepare for the advanced placement exam, additional readings and/or assignments will be provided at the student's option.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Introduction to Economics
- Ch.3 - The Consumer
- Ch.4 - Business
- Ch.5 - Government
- Ch.6 - Labor
- Ch.7 - Agriculture
- Ch.8 - Measuring the Economy
- Ch.9 - Money and Banking
- Ch.10 - Investments
- Ch.11 - Taxation
- Ch.12 - Monetary and Fiscal Policy
- Ch.13 - Final Exam
- Ch.14 - Course Survey

## Geography



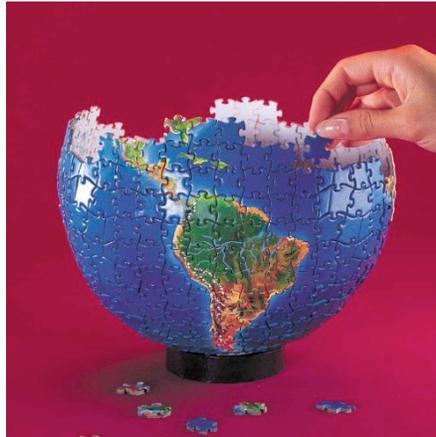
### COURSE DESCRIPTION

This course is dedicated to a study of the world around us. The class starts with an introduction to geography, in which students will learn the five themes of geography, the features that define the earth, the climate patterns of the earth, how to study peoples and cultures of the earth and how to use various geographic tools.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Introduction to Physical Geography
- Ch.3 - Maps, Remote Sensing, and GIS
- Ch.4 - The Science of Physical Geography
- Ch.5 - Introduction to Systems Theory
- Ch.6 - The Universe, Earth, Natural Spheres, and Gaia
- Ch.7 - Energy and Matter
- Ch.8 - Introduction to the Atmosphere
- Ch.9 - Introduction to the Atmosphere II
- Ch.10 - Introduction to the Hydrosphere
- Ch.11 - Introduction to the Biosphere
- Ch.12 - Introduction to the Lithosphere
- Ch.13 - Introduction to the Lithosphere II
- Ch.14 - Glaciation

## World History



### COURSE DESCRIPTION

The course is a world history course and for this reason will not be a Euro-centric history course. Course will focus on the beginnings of civilization some five to seven thousand years ago in Mesopotamia, Africa, Asia and the Americas. We will then proceed to Classical Civilizations, the Axis Age and conclude the course with an understanding of the world in 1500. Lecture will stress social, cultural, political and economic history of the various world civilizations. The readings and lectures are designed to challenge erroneous assumptions about world history and the current reality that the last 5,000 years has bequeathed to us. Therefore, the course is built around critical thinking and online historical problem solving. Memorization and regimentation have nothing to do with learning, but rather lead to mental conformity and the impoverishment of intellectual development. Finally, this is not a "lollipop" history course where everything works out for the best. World History is a terrible drama full of triumphs and tragedies. We will be studying world history in all its forms and not world mystery.

### CHAPTERS

- Welcome to Class
- Ch 1. - Human Origins
- Ch 2. - City-States
- Ch 3. - Indo - Europeans
- Ch 4. - Egyptian and Nubian Empires
- Ch 5. - Mountain and Sea Cultures
- Ch 6. - Roman Republic
- Ch 7. - Germanic Kingdoms
- Ch 8. - Medieval Society
- Ch 9. - Renaissance
- Ch 10. - Spain's Empire
- Ch 11. - Enlightenment
- Ch 12. - French Revolution

## World History/Geography



### COURSE DESCRIPTION

Let's go over briefly some of the things we will be covering during the course. The purpose is to teach students the designated geographical areas with an emphasis on global connections and interdependence. Units include geographical, historical, cultural, political and economic themes. Each student will develop an awareness and appreciation of cultural diversity.

At the end of the course the student should have an understanding of the nations of the world, their location, economies, and major geographic features.

### CHAPTERS

- Ch1. - Introduction
- Ch2. - Understanding a Functional Diagram
- Ch3. - Reading Map Symbols
- Ch4. - Types of Maps
- Ch5. - North America
- Ch6. - Mexico
- Ch7. - Brazil
- Ch8. - Project 1
- Ch9. - The West Indies
- Ch10. - Western Europe
- Ch11. - Eastern Europe
- Ch12. - Russia
- Ch13. - Middle East
- Ch14. - Southeast Asia
- Ch15. - India
- Ch16. - China
- Ch17. - Japan
- Ch18. - Australia
- Ch19. - Oceans
- Ch20. - Africa
- Ch21. - Travel on your Own

## Social Sciences

### CJ: Crime Scene Technology A



#### COURSE DESCRIPTION

This course is a basic study of crime scene technology and investigation in the United States. Topics include concepts of law and crime, the criminal justice process, overview of criminal justice agencies, current criminal justice issues, and interactions and conflicts between criminal justice agencies.

#### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Overview of Crime Scene Technology
- Ch.3 - Introduction to Crime Scene Analysis
- Ch.4 - Introduction to Criminalistics
- Ch.5 - Crime Scene Reconstruction
- Ch.6 - Arrest, Interrogation and Confession
- Ch.7 - Police Identification Procedures
- Ch.8 - Police Lie Detection Methods
- Ch.9 - Informants, Surveillance and Undercover Operations
- Ch.10 - Probable Cause
- Ch.11 - Death Investigation
- Ch.12 - Patterns and Trends in Violent Crimes
- Ch.13 - Forensic Pathology

#### OBJECTIVES

1. To acquire an informed understanding of the basic components of crime scene technology and investigation
2. To recognize the major sources of crime data, and their uses and limitations
3. To examine the historical evolution of the role of policing in a modern society
4. To examine crime scene reconstruction
5. To examine informants, surveillance and undercover operations
6. To understand probable cause
7. To introduce you to forensic pathology.

## CJ: Crime Scene Technology B



### COURSE DESCRIPTION

This course is a basic study of crime scene technology and investigation in the United States. Topics include concepts of law and crime, the criminal justice process, overview of criminal justice agencies, current criminal justice issues, and interactions and conflicts between criminal justice agencies.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Overview of Criminal Investigation
- Ch.3 - M. O. and Signature Compared
- Ch.4 - Property Crime Investigation
- Ch.5 - Arson Investigation
- Ch.6 - Cyber Crime and Cyberspace Law
- Ch.7 - Data Recovery and Computer Forensics
- Ch.8 - Narcotics Crime Investigation and Intelligence Analysis
- Ch.9 - Organized Crime Investigation
- Ch.10 - Gang Crime Investigation
- Ch.11 - Terrorism Investigation
- Ch.12 - Investigative Methods in Forensic Accounting

### OBJECTIVES

1. To acquire an informed understanding of the basic components of crime scene technology and investigation
2. To recognize the major sources of crime data, and their uses and limitations
3. To examine the historical evolution of the role of policing in a modern society
4. To examine crime scene reconstruction
5. To examine informants, surveillance and undercover operations
6. To understand probable cause
7. To introduce you to forensic pathology.

## CJ: Intro to Criminal Justice



### COURSE DESCRIPTION

This course is a basic study of all components of the criminal justice system in the United States. Topics include concepts of law and crime, the criminal justice process, overview of criminal justice agencies, current criminal justice issues, and interactions and conflicts between criminal justice agencies. (no prerequisites)

### CHAPTER

- Ch.1 - Introduction
- Ch.2 - What is Criminal Justice
- Ch.3 - Crime Data and Crime Measurement
- Ch.4 - Crime Theories
- Ch.5 - Criminal Law
- Ch.6 - The Police Component
- Ch.7 - Police Issues
- Ch.8 - Police Laws
- Ch.9 - Court Component
- Ch.10 - Court Issues
- Ch.11 - Sentencing
- Ch.12 - Community Corrections
- Ch.13 - Institutional Corrections
- Ch.14 - Prison Issues

### OBJECTIVES

1. To acquire an informed understanding of the basic components of justice processes
2. To recognize the major sources of crime data, and their uses and limitations
3. To examine the historical evolution of the role of policing in a modern society
4. To examine criminal court systems and adversarial concepts
5. To examine correctional systems and the purposes of punishment
6. To appreciate the basic differences between juvenile and adult systems
7. To appreciate emerging and international forms of justice

## CJ: Criminal Law



### COURSE DESCRIPTION

This course is a generic study of criminal law in the United States, and does not cover any specific federal or state law. Topics include principles of criminal law, principles of criminal liability, complicity, inchoate crimes, defenses, justifications, excuses, crimes against persons, crimes against property, and crimes against public order. (no prerequisites)

### CHAPTERS

- Ch.1 - Introduction to Criminal Law
- Ch.2 - Fundamentals of Criminal Law
- Ch.3 - Limits of Criminal Law
- Ch.4 - Principles of Criminal Liability
- Ch.5 - Accomplice Law
- Ch.6 - Inchoate Offenses
- Ch.7 - Defenses to Crime
- Ch.8 - Law of Homicide
- Ch.9 - Advanced topics in the law of homicide: Intention
- Ch.10 - Assault, Battery and Other Crimes Against Persons
- Ch.11 - Crimes Against Habitation
- Ch.12 - Crimes against Property: Theft and Modern Larceny Law
- Ch.13 - Crimes against Public Order and Morals
- Ch.14 - Crimes against the Government
- Ch.15 - Crimes by the Government

### OBJECTIVES

1. To understand key cases, legal terms, clauses, and chronologies in criminal law
2. To understand the criminal elements of crimes against person, property, order, and state
3. To examine the historical evolution of criminal law maxims, doctrines, and principles
4. To analyze both early and contemporary judicial thinking and legal reasoning
5. To articulate informed opinion over important, controversial issues in criminal law
6. To recognize important considerations dealing with the rights of criminal defendants
7. To appreciate the scholarly study of law and its application

## CJ: Juvenile Justice



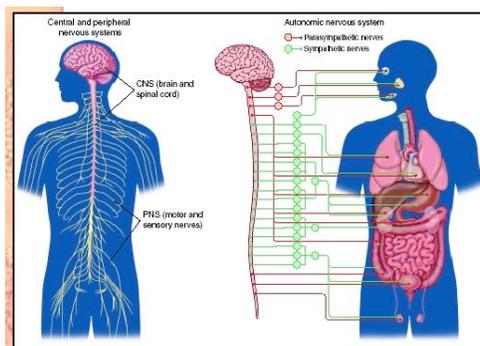
### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Juvenile Delinquency
- Ch.3 - History of Juvenile Justice - Early Times
- Ch.4 - History of Juvenile Justice - Institutional Era
- Ch.5 - History of Juvenile Justice - Juvenile Court Era
- Ch.6 - Problems of Today's Juveniles - Drug Abuse and Alcohol
- Ch.7 - Problems of Today's Juvenile - Violence
- Ch.8 - Problems of Today's Juvenile - Other Forms of Violence
- Ch.9 - Significant Court Decisions
- Ch.10 - Summary of Differences Adult/Juvenile

### OBJECTIVES

1. To acquire an informed understanding of the basic components of the juvenile justice processes
2. To recognize the major sources of crime data, and their uses and limitations
3. To examine the historical evolution of the role of policing in a modern society
4. To examine criminal court systems and adversarial concepts
5. To examine correctional systems and the purposes of punishment
6. To appreciate the basic differences between juvenile and adult systems
7. To appreciate emerging and international forms of justice

## Psychology



### COURSE DESCRIPTION

Psychology is the study of cognitions, emotions, and behavior. Psychologists are involved in a variety of tasks. Many spend their careers designing and performing research to better understand how people behave in specific situations, how and why we think the way we do, and how emotions develop and what impact they have on our interactions with others. These are the research psychologists who often work in research organizations or universities. Industrial-organizational psychologists work with businesses and organizations to help them become more productive, effective, and efficient, and to assist them in working with their employees and their customers. Practitioners, typically counseling and clinical psychologists, work with individuals, couples, families, and small groups to help them feel less depressed, less anxious, become more productive or motivated, and overcome issues which prevent them from living up to their potential.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Introduction to Psychology
- Ch.3 - History of Psychology
- Ch.4 - Evolution of Psychology
- Ch.5 - Brain and Nervous System
- Ch.6 - Sensation and Perception
- Ch.7 - Learning
- Ch.8 - Memory
- Ch.9 - Personality
- Ch.10 - Psychologic Disorders
- Ch.11 - Treatment
- Ch.12 - Auditory System
- Ch.13 - History & People
- Ch.14 - Scientific Method & Experiments
- Ch.15 - Neurotransmission
- Ch.16 - Brain Imaging
- Ch.17 - Visual System
- Ch.18 - Course Survey

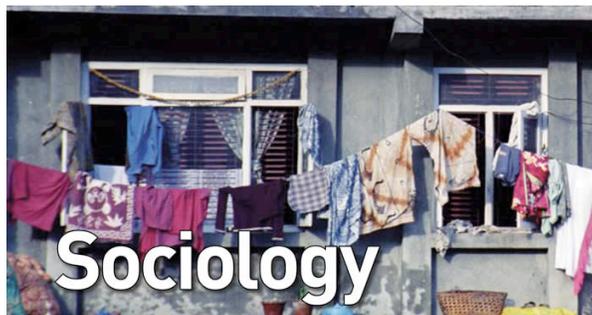
### OBJECTIVES

1. Describe – The first goal is to observe behavior and describe, often in minute detail, what was observed as objectively as possible
2. Explain – While descriptions come from observable data, psychologists must go beyond what is obvious and explain their observations. In other words, why did the subject do what he or she did?
3. Predict – Once we know what happens, and why it happens, we can begin to speculate what will happen in the future. There's an old saying, which very often holds true: "the best predictor of future behavior is past behavior."

4. Control – Once we know what happens, why it happens and what is likely to happen in the future, we can exert control over it. In other words, if we know you choose abusive partners because your father was abusive, we can assume you will choose another abusive partner, and can therefore intervene to change this negative behavior.

5. Improve – Not only do psychologists attempt to control behavior, they want to do so in a positive manner, they want to improve a person's life, not make it worse. This is not always the case, but it should always be the intention.

## Sociology



### COURSE DESCRIPTION

Introduction to Sociology presents basic concepts and theories covering many areas of contemporary sociology. Topics explored in this class include sociology as science, culture, socialization, social groups, social organization, deviance, crime, class, race and ethnicity, gender, family, social change (with a focus on international development), and population.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - What is Sociology
- Ch.3 - Perspectives
- Ch.4 - Culture
- Ch.5 - Socialization
- Ch.6 - Social Structure
- Ch.7 - Social Organization
- Ch.8 - Adolescents & Adults
- Ch.9 - Deviance
- Ch.10 - Crime & Deterrence
- Ch.11 - Course Survey

### OBJECTIVES

1. be able to use and critique alternative explanatory systems of theories used in sociology (conflict, functionalist, interactionist)
2. be able to employ the appropriate methods, technologies, and data that social and behavioral scientists use to investigate the human condition including the case study, surveys, existing data, and the experiment.
3. be familiar with the concepts of culture and its components (e.g., norms, values) and to identify and understand differences and commonalities within diverse cultures.
4. be familiar with the "nature vs. nurture debate," the impact of learning on the human condition, and important agents of socialization.
5. be able to examine social institutions and processes across a range of historical periods, social structures, and cultures.
6. be able to describe various levels of social organization including groups, formal organizations and bureaucracy, and larger forms of organization like community, society, and the world-system.
7. be able to describe various explanations for deviance.
8. be familiar with types of crime, explanations for crime, and trends in crime rates.
9. be familiar with major issues related to inequality (e.g., social class, race & ethnicity, and gender).
10. become familiar with the role the economy plays in our lives.

## STEM Computer Programming/Computer Science

### GD: Intro to Game Industry



#### COURSE DESCRIPTION

Video games are an increasingly important medium in terms of national use, cultural impact and profitability. With over \$30 billion in worldwide sales last year (more than motion pictures) and a rapidly growing base of mainstream users, games are a medium that needs to be examined. However, this industry, its history and the cultural practices it engenders have been seriously neglected in comparison to television and other media.

The course has been designed as a broad introduction to the medium and history of video games and the industry. It draws from a wide variety of disciplines to examine video games as aesthetic products, cultural products, economic outputs, as a policy issue, as possible sources of effects and sites of community.

The course will consist of both readings, exercises, and projects. We begin with the foundations in the first few CHAPTERS leading towards creating our first video game in later CHAPTERS and a final project at the end of the chapter.

#### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.2 - Introduction to Games
- Ch.3 - Evolution of Games
- Ch.4 - Game Genres: Action & Strategy
- Ch.5 - Game Genres: Role Playing & Sports
- Ch.6 - Game Genres: Vehicle & Adventure
- Ch.7 - Puzzle Games
- Ch.8 - Game Platforms
- Ch.9 - Production Cycle
- Ch.10 - Game Creation
- Ch.11 - Adventure Game Design Project
- Ch.12 - Reverse Engineer a Game



## IT: Multimedia & Graphics



### COURSE DESCRIPTION

A multimedia product uses a combination of images, words and sounds to present information. Multimedia is increasingly being used in education, advertising and entertainment. In this Revision Bite, you will learn about the different types of multimedia products.

Graphics are visual elements - images, symbols, diagrams etc. - used to make printed information more interesting or lively. They are an important method of communication. They can be used to enhance many forms of media, from buttons on webpages to road signs.

### CHAPTERS

- Ch.1 - Welcome to Class
- Ch.4 - Managing Projects
- Ch.7 - Managing Projects II
- Ch.11 - Using ICT
- Ch.14 - Using ICT II
- Ch.16 - Using ICT III
- Ch.19 - Using ICT IV
- Ch.21 - Multimedia
- Ch.24 - Multimedia II
- Ch.26 - Multimedia III
- Ch.29 - Graphics
- Ch.34 - Graphics II

## IT: Word Processing



### COURSE DESCRIPTION

This course is a broad introduction to the use of computers as tools for creativity, communications and organizing information. We do not assume that you have any previous computer experience, but even those students who are already advanced computer users will find activities to challenge them. In addition to learning the technical fundamentals of computer use, we hope to help you build your skills in researching information, making appropriate ethical choices about the use of computers, and using technology to help you learn on your own and pass your new skills on to others.

The role of the computer as a communications tool will be central to this course. We expect that much of the interaction between students and teachers will be conducted through electronic mail and other network communications technologies. All students will be given computer accounts on Uni High's multi-user computers, as well as some space to edit and organize your electronic communications. We will also emphasize the use of the Internet as a tool for finding information and communicating with your peers worldwide.

Much of your grade will be based on how well you work together and interact with the teachers and other students in this course. Those who already have some computer skills at the beginning of the year are expected to help the teachers by passing on their knowledge to the other students. There's nothing like having to teach a subject to someone else to help you learn it yourself! We want every student to work on developing the ability to teach each other and cooperate in the kind of team environment that is necessary in all real-world technology projects.

### CHAPTERS

- Ch.1 - Introduction
- Ch.2 - Computer Basics
- Ch.3 - Applications
- Ch.4 - Windows
- Ch.5 - Glossary of Terms
- Ch.6 - Word Processing
- Ch.7 - Word Processing: Formatting
- Ch.8 - Word Processing: Images
- Ch.9 - Word Processing: Auto Tools
- Ch.10 - Word Processing: Wizards
- Ch.11 - Word Processing: Brochures
- Ch.12 - Course Survey