



## **BCLC ONLINE COURSES:**

### **ENGLISH**

#### **English 1**

The lessons, projects and writing activities offered in this course cover grammar, punctuation, word usage and spelling. Students will learn vocabulary, reading strategies, and literary elements, devices and techniques. The course also covers communication skills, such as giving speeches, using visual aids, and communicating in the workplace, as well as writing and revising using MLA style guidelines.

#### **English 2**

The lessons, projects, and writing activities cover grammar; punctuation; word usage; spelling; vocabulary; reading comprehension; literary elements, devices, and techniques; communications, such as giving speeches, using visual aids, and workplace communications; and writing and revising. Students learn about drafting narratives, essays, and research reports, including using MLA style guidelines.

#### **English 3**

The lessons, projects, and writing activities include reading and analyzing selections of American literature for literary elements, devices, and structure; practicing writing narratives, exposition, persuasion, and research; practicing communication skills, such as giving speeches, using visual aids, and communicating in the workplace; and instruction in grammar, punctuation, usage, and mechanics.

## **English 4**

The lessons, projects and writing activities in this course cover grammar, punctuation, word usage, spelling and vocabulary. Students will also learn communication skills, academic and workplace skills, reading strategies, study skills and modes of reasoning. Finally, the course will cover literary devices, forms, styles, techniques, and influences, as well as the writing process and different types of writing, such as narrative, exposition and research.

## **MATHEMATICS**

### **Algebra 1**

This course covers such key concepts as variables, function patterns, graphs, operations with rational numbers, and properties of rational numbers. Students solve linear equations and inequalities, and study slope, and graphing linear functions. This course also covers exponents, polynomials, and factoring. It also helps students study quadratic equations and functions, radical expressions and equations, rational expressions and functions, and study counting methods.

### **Algebra 2**

In this course, students solve equations, inequalities, systems and problems using matrices, inverse matrices, matrix operations, and determinants. Students also learn about different functions and are introduced to the imaginary number  $i$  and find complex solutions to equations. This course also introduces exponential and logarithmic functions, conic sections, probability, statistics, sequences, and series.

### **Geometry**

This course addresses basic skills in geometry including reasoning, developing proofs, identifying geometric figures, and constructing figures. This course also teaches students about the properties of right triangles and trigonometric ratios, transformations of plane figures, and the parts of a circle and their properties. Additionally, students will develop and apply formulas for area, surface area, and volume of two- and three-dimensional figures.

### **Pre-Calculus**

This course presents students with a formal study of functions, an analysis of sequences and series, counting principles, the binomial theorem, and probability. Students will use technology to employ multiple approaches to problem solving and data modeling. This course also includes topics on trigonometry, parametric curves, the polar coordinate system, and complex numbers in polar form. Students will solve problems using the Laws of Sines and Cosines and will also analyze vectors and conics, study systems of equations and matrices, and solve systems using matrices. Limits and continuity are introduced.

### **Integrated Math 1**

This course teaches students how to simplify expressions and solve linear equations, introduces basic geometric terms and logic, reasoning, and proof and addresses linear equations in a graphical sense, and parallel and perpendicular lines, first from an algebraic perspective, followed by proving associated theorems using geometry. This course also teaches students how to solve proportions, use square roots, explore exponents, simplify polynomials, factor and solve quadratic equations, and apply these skills to geometry topics such as quadrilaterals, polygons, area, and volume

### **Integrated Math II**

This course teaches students about linear equations and inequalities, functions and families of functions, triangles, and how to apply their knowledge to solve systems and prove theorems. This course also teaches students about geometrical relationships in triangles and plane figures, special right triangles, basic trigonometry, radicals, polynomials, rational equations, probability and statistics.

### **Integrated Math III**

This course reviews graphing in the coordinate plane, graphical and algebraic approaches to solving systems of equations and constructions, isometric transformations, symmetry, and dilations. This course also teaches students about a variety of nonlinear relationships, circles and conic sections, arithmetic and geometric sequence

**Integrated Mathematics IV** In this course students will learn about analyzing data, standard deviation, and normal distributions. They will also learn about arithmetic and geometric sequences and their series, rational and inverse functions, radians, degrees, and the unit circle. This course also teaches students about trigonometric functions, inverse trigonometric functions, trigonometric identities, sum and difference formulas, applications of trigonometry, polar coordinates, and vectors. They will also learn about functions, polynomial functions, exponential functions, and logarithmic functions.

## **HISTORY/SOCIAL SCIENCE**

### **Government (One Semester Class)**

This course covers the foundations of American government, political behavior, and the three branches of the federal government.

### **Economics (One Semester Class)**

This course addresses concepts of economics, including a review of the American free enterprise system. Students learn about markets, business and labor, and banking and finance in the microeconomics sections, and then learn about measuring economic performance, the government's role in the economy, and international trade and development in the macroeconomics section.

### **US History**

This course contains lessons addressing historical periods from the American Revolution to globalization and the twenty-first century. The lessons address key concepts, important historical figures, and significant events to help students gain an understanding of the political, economic, military and social structures of the early years of the United States through its emergence as a global superpower.

### **World History**

This course contains lessons addressing historical periods from Prehistory through Globalization in the 21st century. The objectives of the lessons are directly aligned to current standards. Each multimedia lesson is designed to teach the major concepts for each historical period through text, visual aids, activities and assessments.

# SCIENCE

## Physical Science

This course addresses key chemistry concepts and processes from properties and states of matter, atomic structure, organization of the periodic table, types of chemical bonds and reactions, solutions, carbon chemistry, and nuclear chemistry. This course also addresses key physics concepts and processes from force and motion, work, power, machines, energy, optics, electricity, and magnetism. Concepts are explored through animations and videos and will assist students in advanced chemistry and physics courses.

## Earth Science

This course addresses major concepts, such as the materials which compose earth, the rock cycle and types of rocks, Earth's resources, formation and movement of soil, glaciers, deserts, alluvial landscapes, earthquakes, volcanoes, plate tectonics, mountain building, and geologic time. This course also covers concepts such as the ocean floor, seafloor sediments, waves, tides and shoreline processes, characteristics of the atmosphere, precipitation, air pressure and wind, storms, climate, early astronomy, Earth-Moon-Sun interactions, and solar system

## Environmental Science

This course presents relationships between organisms and how these relationships relate to the functioning of ecosystems. Students learn the key concepts and processes of nutrient cycling, biomes, pollution, energy resources, and habitat destruction. The course also covers ways to promote biodiversity and create a sustainable future.

# FOREIGN LANGUAGE

## **Spanish 1**

Students will learn basic Spanish grammar to help build their fluency and understanding. There are many opportunities to practice what they learn through interactive practice activities in the form of games, written practice, listening, and speaking exercises.

# ELECTIVES

## **Introduction to Anthropology 1 (One Semester Class)**

The aim of anthropology is to use a broad approach to gain an understanding of our past, present and future, and in addition address the problems humans face in biological, social and cultural life. This course will explore the evolution, similarity and diversity of humankind through time. It will look at how we have evolved from a biologically and culturally weak species to one that has the ability to cause catastrophic change. Exciting online video journeys to different areas of the anthropological world are just one of the powerful learning tools utilized in this course.

## **Introduction to Astronomy (One Semester Class)**

Students explore a broad range of astronomy topics, including the planetary system, stars, galaxies, and the universe. Students also learn about the scientific method and the evolution of scientific ideas.

## **Introduction to Digital Photography (One Semester Class)**

Have you ever wondered how photographers take such great pictures? Have you tried to take photographs and wondered why they didn't seem to capture that moment that you saw with your eyes? The Introduction to Digital Photography course focuses on the basics of photography, including building an understanding of aperture, shutter speed, lighting, and composition. Students will be introduced to the history of photography and basic camera functions. Students will use the basic techniques of composition and camera functions to build a portfolio of images, capturing people, landscapes, close-up, and action photographs

### **Introduction to Psychology (One Semester Class)**

Students gain an understanding of human behavior, including biological foundations and the brain, sensation, motivation, and perception. Students explore the relationship between learning and memory; various personality theories; emotions; states of consciousness; cognition; life-span development; and applied psychology.

### **Introduction to Sociology (One Semester Class)**

Students examine the sociological processes that underlie everyday life, focusing on globalization, cultural diversity, critical thinking, new technology, and the growing influence of mass media.

### **Introduction to Journalism (One Semester Class)**

Who? What? When? Where? Journalism provides us with the answers to these questions for the events that affect our lives. In this course, students will learn how to gather information, organize ideas, format stories for different forms of news media, and edit their stories for publication. The course will also examine the historical development of journalism and the role of journalism in society.

### **Health**

In this course, students will be introduced to the various disciplines within the health sciences, including toxicology, clinical medicine, and biotechnology. They will explore the importance of diagnostics and research in the identification and treatment of diseases. The course presents information and terminology for the health sciences and examines the contributions of different health science areas.

## **OTHER**

### **SAT Preparation Class**

Both Language Arts and Mathematics sections are available. These courses cover the different types of questions that are found on the SATs to prepare the student for taking the SATs.

### **Driver's Education**

An alternative to studying the DMV Driver's Handbook and going to a class, the online driver's ed course allows the student to work at their own pace. Once the course is successfully completed, the student receives a certificate of completion.