



# GIANT CAMPUS of WASHINGTON 2010-2011



giant campus®

of Washington



## GIANT CAMPUS OF WASHINGTON

Whether you are here to explore a career in technology, to prepare yourself for college, or just to experience online learning for the first time, our program of study will give you the opportunity to learn valuable skills, connect with like-minded students, and draw support from a faculty that is dedicated to your academic success. We hope you take full advantage of our program.

This catalog includes some of the most comprehensive, up-to-date technology courses available anywhere in the country. But great curriculum is only part of what makes an outstanding program. It also takes students, teachers, parents, and staff working together. We hope you'll join us next semester.

Sincerely,

James Peters  
Head of School  
Giant Campus of Washington  
Email: [jamesp@giantcampus.com](mailto:jamesp@giantcampus.com)



## TO LEARN MORE

Join us online to learn more about our program.

Visit [www.giantcampuswa.com](http://www.giantcampuswa.com) for online orientation sessions and the latest information on course schedules and registration. Or, to speak with an enrollment advisor, call 1.888.904.2267.

# TABLE OF CONTENTS

## ELECTIVE COURSES

<b>FOUNDATIONS</b>	
Computer Literacy I	4
Computer Literacy II	4
<b>GAME DESIGN</b>	
Game Design I	4
Online Game Design	4
<b>DIGITAL ARTS</b>	
3D Art I - Modeling	5
3D Art II - Animation	5
Audio Engineering	5
Computer-Aided Design (CAD)	5
Digital Arts I	6
Digital Arts II	6
Digital Photography and Graphics	6
Digital Video Production	6
<b>FLASH AND WEB</b>	
Flash Animation	7
Web Design	7
<b>PROGRAMMING</b>	
Introduction to C++ Programming	7
<b>BUSINESS INNOVATION</b>	
Green Design and Technology	7
Introduction to Entrepreneurship I	8
Introduction to Entrepreneurship II	8
Introduction to Marketing II	8

## CORE COURSES

<b>LANGUAGE ARTS</b>	
English III	9
English IV	9
<b>MATHEMATICS</b>	
Algebra II	9
Geometry	10
Pre-Calculus	10
Calculus	10
AP Statistics	10
<b>SCIENCE</b>	
Biology	11
Chemistry	11
Physics	11
<b>SOCIAL STUDIES</b>	
American Government	12
Economics	12
American History	12
World History	13

## ELECTIVE COURSES, GRADES 9-12



### FOUNDATIONS

#### Computer Literacy I

Today's students must be able to effectively use technology to research, organize, create, and evaluate information. This course provides a foundation in the skills and concepts that define computer literacy in the 21st century. From the basics of keyboarding to Internet research techniques, document creation, and digital citizenship, you'll practice essential skills through individual and team projects. When taken with Computer Literacy II, this course maps to the National Educational Technology Standards (NETS). (.5 credit)

**Prerequisite:** None

**Student Materials:** Open Office (Free download)

#### Computer Literacy II

This course builds on level 1 to develop the skills and concepts essential for computer literacy in the 21st century. From the basics of keyboarding to Internet research techniques, document creation, and digital citizenship, you'll practice essential skills through individual and team projects. When taken with Computer Literacy I, this course maps to the National Educational Technology Standards (NETS). (.5 credit)

**Prerequisite:** Computer Literacy I

**Student Materials:** Open Office (Free download)

### GAME DESIGN

#### Game Design I

This course is for anyone who loves gaming and wants to design and build original games from scratch. You'll learn how to use popular game design software to create engaging, interactive games in a variety of genres. In addition, you'll get a solid foundation in the basic concepts of game development. By the end of this course, you will have a variety of polished games for your game development portfolio. (.5 credit)

**Prerequisite:** None

**Student Materials:** Multimedia Fusion 2 (Standard)

#### Online Game Design

If you like playing Flash games online and want to find out how to design them, this course is for you. You'll learn how to develop a variety of games for the Web using Adobe® Flash®, the world's most popular authoring tool for online games. You'll learn some basic programming concepts as you use ActionScript®, the native scripting language of Flash, to develop cool games, then publish them online to share with your friends. By the end of this course, you will have a collection of fully-functioning multi-level online games. (.5 credit)

**Prerequisite:** None

**Student Materials:** PC with 1GB of RAM, Flash CS4

## ELECTIVE COURSES, GRADES 9-12

### DIGITAL ARTS

#### 3D Art I - Modeling

This course will introduce you to 3D modeling tools and concepts. Using Blender, the popular open-source 3D modeling package, students will learn the basics of creating shapes, adding textures and lighting, and rendering. By the end of the course, students will have produced a series of increasingly sophisticated projects for their 3D portfolio. This course is suitable for students with no prior experience with 3D game design or digital media authoring tools. (.5 credit)

**Prerequisite:** None

**Student materials:** PC with 1GB of RAM, Blender (free download)

#### 3D Art II - Animation

In this advanced course, you'll build on the skills you developed in 3D Art I to learn 3D animation techniques. Using Blender, the world's most powerful open-source modeling tool, you'll master the basics of animation—rigging, bones and movement while learning how to apply traditional animation techniques to your 3D models. (.5 credit)

**Prerequisite:** 3D Art I - Modeling

**Student materials:** PC with 1GB of RAM, Blender (free download)

#### Audio Engineering

In this introductory course, you'll learn about the physics of sound and the history of recording technologies. Next, you'll learn about the four stages of professional music recording projects: recording, editing, mixing, and mastering. Using Audacity, an open-source recording and mixing program, you'll practice the techniques used by sound engineers to produce multi-track recordings. Through a series of engaging hands-on projects, you'll learn the fundamental concepts of audio engineering. (.5 credit)

**Student materials:** Audacity (free download)

**New! Available for Fall Semester, 2010**

#### Computer-Aided Design (CAD)

Computer-aided design systems are used by designers and manufacturers in virtually every industry. In this course, you'll master the basics of CAD software: creating points, lines, other geometric forms, isometric drawings, and 3D models. Learn how to translate initial concepts into functional designs and 3D walkthroughs. Explore career options for CAD designers in this hands-on introductory level course. (.5 credit)

**Prerequisite:** None

**Student Materials:** PC with 1GB of RAM, CAD software (free download)

*continued*



## ELECTIVE COURSES, GRADES 9-12

### DIGITAL ARTS, CONTINUED

#### Digital Arts I

In this exploratory course, you'll learn the elements and principles of design, as well as foundational concepts of visual communication. While surveying a variety of media and art, you'll use image editing, animation, and digital drawing to put into practice the art principles you've learned. Discover career opportunities in the design, production, display and presentation of digital artwork. Respond to the artwork of others, and learn how to combine artistic elements to create finished pieces that effectively communicate your ideas. (.5 credit)

**Student materials: Free downloads**

**New! Available for Fall Semester, 2010**

#### Digital Arts II

In the second part of this two-part series, you'll build on the skills and concepts you learned in Part I as you develop your vocabulary of digital design elements. By the end of the course, you will have created a collection of digital art projects for your digital design portfolio. (.5 credit)

**Prerequisite: Digital Arts I**

**Student materials: Free downloads**

**New! Available for Spring Semester, 2011**

#### Digital Photography and Graphics

This is the perfect course for anyone who wants to create compelling, professional looking graphic designs and photos. You'll learn the basics of composition, color, and layout before moving on to technical topics like working with layers and masks, adding special effects, and effectively using typefaces to create visual impact. At the end of this course, you'll have created a variety of original projects for your graphic design portfolio. (.5 credit)

**Prerequisite: None**

**Student Materials: GIMP (free download)**

#### Digital Video Production

In this course, you'll be introduced to all aspects of digital video production, from storyboarding scenes to creating shot lists to editing a finished, professional product. Throughout this course, you'll complete hands-on projects to master the essentials of recording, capturing, and editing video. This course is an excellent introduction to the exciting field of digital video production. (.5 credit)

**Prerequisite: None**

**Student Materials: Windows Movie Maker (free with Windows) and a video camera capable of connecting to a PC.**



## ELECTIVE COURSES, GRADES 9-12

### FLASH AND WEB

#### Flash Animation

This introductory course teaches all the animation essentials. You'll learn cell animation, timelines, movies, sound—the works—using Adobe® Flash® Creative Suite® 4 (CS4), the preferred design tool of industry pros worldwide. Learn how to draw and animate movies, then publish them to the Web. Create your own original art, or choose from the art asset libraries included for each project. At the end of this course, you'll have a portfolio of completed Flash animations. (.5 credit)

**Prerequisite:** None

**Student Materials:** PC with 1GB of RAM, Flash CS4

#### Web Design

This course provides a comprehensive introduction to the essentials of Web design, from creating page layouts to coding with CSS and JavaScript to create a complete Web site. Through real-world design scenarios and hands-on projects, you'll create compelling, usable Web sites using KompoZer, one of the Web's easiest to use open source editing tools. (.5 credit)

**Prerequisite:** None

**Student Materials:** KompoZer, GIMP (free downloads)

### PROGRAMMING

#### Introduction to C++ Programming

Programmers start here. In this course, you'll learn key programming concepts and then apply them using Microsoft® Visual C++® 2008 Express Edition, the free version of Microsoft's Visual Studio® toolkit. Complete a series of increasingly complex projects while you learn C++, which is still one of the most versatile and powerful programming languages around. Learn the building blocks of programming: functions, loops, arrays, variables and classes. At the end of the course, you will have a portfolio of compiled executables. (.5 credit)

**Prerequisite:** None

**Student Materials:** Microsoft Visual C++ 2008 Express (free download)

### BUSINESS INNOVATION

#### Green Design and Technology

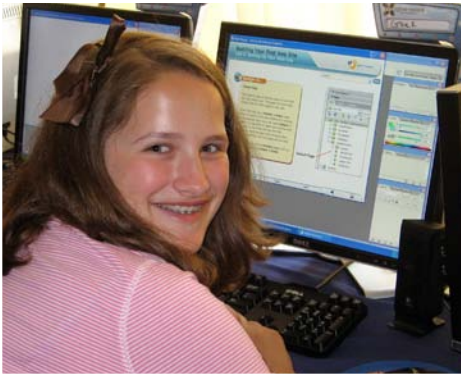
This course will examine the impact of human activities on sustainability while exploring the basic principles and technologies that support sustainable design. Learn about the potential for emerging energy technologies like water, wind, and solar power. Find out how today's businesses are adapting to the increased demand for sustainable products and services. By the end of this course, you will have a comprehensive understanding of this fast-growing field. (.5 credit)

**Prerequisite:** None

**Student materials:** None

**New! Available for Fall Semester, 2010**

*continued*



## ELECTIVE COURSES, GRADES 9-12

### BUSINESS INNOVATION, CONTINUED

#### Introduction to Entrepreneurship I

In this introductory business course, you'll learn what it takes to be an entrepreneur while mastering the basics of planning and launching your own successful business. Whether you want to start your own money-making business or create a non-profit to help others, this course will help you develop the core skills you'll need to be successful. Learn how to come up with new business ideas, how to attract investors, how to market your business and manage expenses. Get inspired by stories from teen entrepreneurs who have turned their ideas into reality, then plan and execute your own business! (.5 credit)

**Prerequisite:** None

**Student Materials:** None

#### Introduction to Entrepreneurship II

Build on the business concepts you learned in Part I of this two-course series. Learn about sales methods, financing and credit, accounting, pricing, and government regulations. Refine your technology and communication skills in speaking, writing, networking, negotiating, and listening. Enhance your employability skills by preparing job-related documents, developing interviewing skills, and learning about hiring, firing, and managing employees. By the end of this course, you will develop a complete business plan and a presentation for potential investors. (.5 credit)

**Prerequisite:** Introduction to Entrepreneurship I

**Student materials:** Google docs (free Web service)

**New! Available for Fall Semester, 2010**

#### Introduction to Marketing I

Find out what it takes to market a product or service in today's fast-paced business environment. In this two-semester introductory course, you'll learn the fundamentals of marketing using real-world business examples. You'll learn about buyer behavior, marketing research principles, demand analysis, distribution, financing, pricing, and product management. By the end of this series, you will have developed your own comprehensive marketing plan for a new business. (.5 credit)

**Prerequisite:** None

**Student materials:** Google docs (free Web service)

**New! Available for Fall Semester, 2010**

#### Introduction to Marketing II

In the continuation of the two-course series, you'll build on the skills and concepts you learned in Part I to develop a basic understanding of marketing principles and techniques. By the end of this series, you will have developed your own comprehensive marketing plan for a new business. (.5 credit)

**Prerequisite:** Introduction to Marketing I

**Student materials:** Google docs (free Web service)

**New! Available for Spring Semester, 2011**



## CORE COURSES, GRADES 11-12

### LANGUAGE ARTS

#### English III

“Extra, extra, read all about it!” It’s all right here in black and white, in the pages of The Virtual Times newspaper. Published at key periods in our American history, The Virtual Times takes us right into the action. The writing is clear and concise. The stories and opinions give us perspective. The sports and entertainment sections give us the color and flavor of the times.

In English III, the writing and insights of authors throughout our history are collected in the fast-paced pages of The Virtual Times. You’ll gain an appreciation of American literature and the ways it reflects the times in which it was written. You’ll discover how people thought and lived and wrote about their experiences.

You’ll also be asked to observe, investigate and report on stories of today. The goal is to be thorough, accurate and compelling in your writing. Perhaps in times to come, people will want to read what you thought and wrote. (1 Credit)

**Prerequisite:** English II or equivalent

**Student Materials:** None

#### English IV

Come explore the world of big ideas in English IV, where you are able to choose which path you will travel first as you explore highly-engaging, thematic units. Each path will guide you through a series of literary pieces that allow you to analyze the political, social, economic, and cultural messages of its time as well as its relevance to the world you live in today. Each path revolves around a central theme. The works in the course span a period of over 1,000 years and have been written by authors who share common ideas, but employ a variety of literary genres to express their views. Whether it is the dramatic ending of a play, or the colorful images in a verse of poetry, the words of these authors will leave you with a new understanding of the world around you. As you travel down each path, you will create authentic work pieces that will engage you in higher-level learning and provide you with a greater understanding of literature and its connection to the world. (1 Credit)

**Prerequisite:** English III or equivalent

**Student materials:** None

### MATHEMATICS

#### Algebra II

In this course, you’ll know for certain where you are going. As an employee of the Functional Consulting Company, you’ll travel up the corporate ladder as you succeed with each assignment. You’ll go from Junior Associate to Senior Staff Member as you prove what you can do.

Starting with a review of basic algebra, you roll through polynomials, quadratic equations, exponential and logarithmic relations, and arrive at probability and statistics. Very impressive! Along the way, you’ll be guided by your supervisor who is very much in your corner and ready to help with timely advice.

Algebra II is an advanced course using hands-on activities, applications, group interactions, and the latest technology. You’ll have the algebra you need for college admission, and be on a fast track to career success. (1 Credit)

**Prerequisite:** Algebra I or equivalent

**Student materials:** None

*continued*



## CORE COURSES, GRADES 11-12

### MATHEMATICS, CONTINUED

#### Geometry

One day in 2580 B.C., a very serious architect stood on a dusty desert with a set of plans. His plans called for creating a structure 480 feet, with a square base and triangular sides, using stone blocks weighing two tons each. The Pharaoh wanted the job done right. The better our architect understood geometry, the better were his chances for staying alive. Geometry is everywhere, not just in pyramids. Engineers use geometry to bank highways and build bridges. Artists use geometry to create perspective in their paintings, and mapmakers help travelers find things using the points located on a geometric grid. Throughout this course, we'll take you on a mathematical highway illuminated by spatial relationships, reasoning, connections, and problem solving. This course is all about points, lines and planes. Just as importantly, this course is about acquiring a basic tool for understanding and manipulating the real world around you.

**Prerequisite:** Algebra II

**Student materials:** None

#### Pre-Calculus

Students, as mathematic analysts, will investigate how advanced mathematics concepts can solve problems encountered in operating national parks. The purpose of this course is to study functions and develop skills necessary for the study of calculus. The pre-calculus course includes analytical geometry and trigonometry. (1 Credit)

**Prerequisite:** Algebra II

**Student Materials:** None

#### Calculus

Walk in the footsteps of Newton and Leibnitz! An interactive text and graphing software combine with the exciting on-line course delivery to make Calculus an adventure. This course includes a study of limits, continuity, differentiation, and integration of algebraic, trigonometric and transcendental functions, and the applications of derivatives and integrals. (1 Credit)

**Prerequisite:** Pre-Calculus

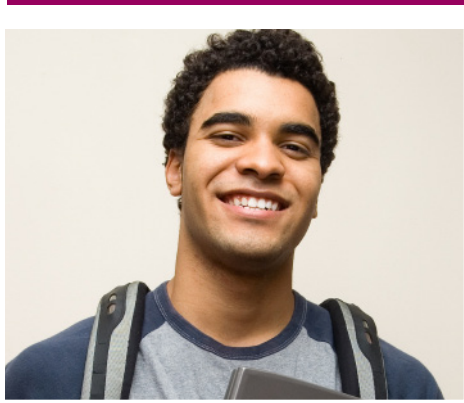
**Student materials:** None

#### AP Statistics

Statistics are used everywhere from fast food businesses ordering hamburger patties to insurance companies setting rates to predicting a student's future success by the results of a test. Students will become familiar with the vocabulary, method, and meaning in the statistics which exist in the world around them. This is an applied course in which students actively construct their own understanding of the methods, interpretation, communication, and application of statistics. Each unit is framed by enduring understandings and essential questions designed to allow students a deep understanding of the concepts at hand rather than memorization and emulation. Students will also complete several performance tasks throughout the year consisting of relevant, open-ended tasks requiring students to connect multiple statistical topics together. The TI-83+/84 OR 89 calculator and computers will be used to explore the world of data and the patterns which can be found by analyzing this information as well as statistical relationships. General topics of study include "exploring data," "planning and design of a study," "anticipating patterns," and "statistical inference." (1 Credit)

**Prerequisite:** Algebra II

**Student materials:** None



## CORE COURSES, GRADES 11-12

### SCIENCE

#### Biology

The Biology course is an in-depth look at the fundamental characteristics of living organisms. It is designed to promote scientific inquiry and discovery. The students will be introduced to the structure, function, diversity, and evolution of living matter. This is a course with real relevance. It encourages curiosity and provides opportunity for students to work on hands on lab activities and develop relationships through collaboratively learning. Engaging in the study of biological science broadens the picture of the world around us. ( 1 Credit)

**Prerequisite: None**

**Student Materials: None**

#### Chemistry

This course is designed as an interactive, 21st century course focusing on Chemistry. Topics include the composition, properties, and changes associated with matter and their applications.

This course is designed to serve as a foundation for the study of Chemistry. The utilization of scientific inquiry, web 2.0 tools, interactive experiences, higher order thinking, collaborative projects, real world application through labs and a variety of assessments all aid the student in ultimately demonstrating a vast understanding of the importance of Chemistry in the world around them; enabling them to apply these properties to their everyday lives. (1 Credit)

**Prerequisite: Algebra I or equivalent**

**Student materials: None**

#### Physics

We stand on the shoulders of giants. Whether by observation, experimentation or brilliant insight, the progress of physics through the centuries has been advanced by scientific geniuses who wanted to know how things work. You'll find out for yourself when you take this course and visit "Physics World."

In each "Physics World" module, you'll discover the contributions of geniuses like Galileo, Newton and Einstein. In their work, you'll learn the concepts, theories and laws that govern the interaction of matter, energy and forces. From tiny atoms to galaxies with millions of stars, the universal laws of physics are there for you to observe and apply. Using laboratory activities, videos, software, and websites, you'll follow in the footsteps of some of the world's greatest thinkers.

This is a serious course that will make you think. It will also make you appreciate the beauty and importance of the science that governs our lives. (1 Credit)

**Prerequisite: English I or equivalent, Algebra II recommended**

**Student materials: None**



## CORE COURSES, GRADES 11-12

### SOCIAL STUDIES

#### American Government

Responsible citizenship means more than just paying taxes. It means understanding the principles and practices of government. It also means defining your beliefs as to what good government is. In this course, you will take on the role of a Washington D.C. intern and spend time working throughout the nation's capital with all three branches of the government- and beyond. As you progress through the internship you will gain a greater understanding on the history of the country's beginnings, and knowledge of how government functions at the local, state and national levels.

The purpose of this course is to help you become an informed and active citizen. In part, the Constitution asserts that, "Governments are instituted among Men, deriving their just Powers from the Consent of the Governed." Make yours an informed consent. (.5 credits)

**Prerequisite: None**

**Student Materials: None**

#### Economics

Economic decisions affect us every day of our lives. Understanding economics means thinking about how scarcity, or limited resources, requires us to make choices and evaluate one option against others.

In this course, you will recognize examples of economics in your daily life. You will see how the economic choices of larger groups, like businesses and governments, affect you and others. As you progress through the course, you will recognize that the costs and benefits of choices connect individuals and groups around the world.

The purpose of this course is to help you become a smart consumer who understands the flow of an economy between individuals, businesses, governments, and the rest of the world. (.5 credits)

**Prerequisite: None, however, successful completion of English II and Algebra I is strongly recommended.**

**Student materials: None**

#### American History

American history is full of big questions that grab our attention. In this course, you will look at some of the most profound questions that thoughtful Americans still debate. You will research many important events throughout the history of America. In the process, you will witness the development of America from its first settlers to today's superpower status.

Questions about slavery, regulation of business, religious freedom, and how to maintain a stable world order have always been part of the American experiment. Most of the time, the answers are not so simple, but we want to know what you think. To develop your personal beliefs, you will use verified sources, including original documents and the writings of people contemporary with the events.

Equally important, this course will challenge you to apply your knowledge and perspective of history to interpret the events of today. The questions raised by history are endlessly fascinating. We look forward to your participation in the debate. (1 credit)

**Prerequisite: None**

**Student materials: None**



## CORE COURSES, GRADES 11-12

### SOCIAL STUDIES, CONTINUED

#### World History

Whether they lived 3,000 years ago or 100 years ago, people are always making history. It does not matter if they lived in medieval Europe or ancient Egypt, the people who came before us are responsible for nearly all that we have today. In this course, you will have the job of “curator” of the Windows of the World Museum. You will be learning about the many wings of the museum and will have the opportunity to speak with your Director about the exhibits.

World History gives students the opportunity to visit the past, connect with the present, and look to the future. Join others in the exploration of ancient and modern civilizations, their impact, and their contributions to today’s global society. The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. Students will use knowledge pertaining to history, geography, economics, political processes, religion, ethics, diverse cultures, and humanities to solve problems in academic, civic, social, and employment settings. (1 credit)

**Prerequisite: None**

**Student Materials: None**



## ABOUT GIANT CAMPUS

Giant Campus is an education and learning experience company that empowers teens and adults through in-person and online technology classes. These programs provide education on cutting-edge technology including game and Web design, digital photography, video production, computer programming, business applications, and much more. Students are encouraged to reach their full creative potential, with classes focused on building collaboration, communication and critical thinking skills. Millions of students worldwide have participated in Giant Campus programs since 1997 in a wide variety of environments, from online classrooms to U.S. military installations, and at camps at prestigious academic institutions such as Duke University, MIT, Stanford University and UCLA. For more information on how Giant Campus is connecting people with technology, visit [www.giantcampus.com](http://www.giantcampus.com).