



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

TO LEARN MORE

Join us online to learn more about our program.

Visit 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.

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ELECTIVE COURSES, GRADES 9-12



FOUNDATIONS

Computer Literacy

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 hands-on projects. (.5 credit)

Prerequisite: None

Student Materials: OpenOffice.org software (free download provided in course)

GAME DESIGN

Game Design

This course is for anyone who loves gaming and wants to design games. 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: Adobe Flash CS4 or CS5

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, you will learn the basics of creating shapes, adding textures and lighting, and rendering. By the end of the course, you will have produced a series of increasingly sophisticated projects for your 3D portfolio. This course is suitable for students with no prior experience in 3D design or digital media authoring tools. (.5 credit)

Prerequisite: None

Student Materials: Blender (free download provided in course)

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 3D 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: Blender (free download provided in course)

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)

Prerequisite: None

Student Materials: Audacity (free download provided in course)

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: CAD software (free download provided in course)

continued

ELECTIVE COURSES, GRADES 9-12

DIGITAL ARTS, CONTINUED

Digital Arts I

In this exploratory course, you'll learn the elements of design, as well as foundational concepts of visual communication. While surveying a variety of media and art, you'll use Inkscape, a popular digital art program, to put into practice what 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)

Prerequisite: None

Student Materials: Inkscape (free download provided in course)

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. You'll learn about the principles of design and use them to create your own unique artworks. 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: Inkscape (free download provided in course)

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 will have a variety of original projects for your graphic design portfolio. (.5 credit)

Prerequisite: None

Student Materials: GIMP (free download provided in course)



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®, the preferred design tool of industry pros worldwide. Learn how to draw and animate movies, and 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: Adobe Flash CS4 or CS5

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 provided in course)

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 provided in course)

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

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, and how to market your business and manage expenses. Get inspired by stories from teen entrepreneurs who have turned their ideas into reality, and 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: None

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: None

Introduction to Marketing II

In the continuation of this 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: OpenOffice.org software (free download provided in course)



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 American history, The Virtual Times takes you right into the action with clear and concise writing. The stories and opinions give perspective, and the sports and entertainment sections give the color and flavor of the times.

The writing and insights of authors throughout American history are collected in the fast-paced pages of The Virtual Times. You'll discover how people thought, lived, and wrote about their experiences.

You'll also observe, investigate, and report on stories of today, using thorough, accurate, and compelling writing skills. 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 a series of highly-engaging themed paths that guide you through literary pieces spanning a period of over 1,000 years.

The authors 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, these literary pieces will leave you with a new understanding of the world. You will analyze the political, social, economic, and cultural messages of the time and its relevance to the world you live in today.

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

CORE COURSES, GRADES 11-12



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'll roll through polynomials, quadratic equations, exponential and logarithmic relations, and probability and statistics. You'll be guided by your supervisor, who is very much in your corner and ready to help with timely advice. (1 credit)

Prerequisite: Algebra I or equivalent

Student Materials: None

Geometry

Geometry has long been used throughout the world. The ancient Egyptians used geometry to build the ancient pyramids. Today, engineers use geometry to bank highways and build bridges. Artists use geometry to create perspective in their paintings. Mapmakers use points and a geometric grid to help travelers find things.

In this course, you'll travel on a mathematical highway illuminated by spatial relationships, reasoning, connections, and problem solving. This course is all about points, lines, and planes. Geometry will give you tools for understanding and manipulating the real world around you. (1 credit)

Prerequisite: Algebra II

Student Materials: None

Pre-Calculus

In this course, you will become a mathematic analyst, using advanced mathematics concepts to solve problems encountered in operating national parks.

You will study functions and develop skills necessary for the study of calculus. This course includes analytical geometry and trigonometry. (1 credit)

Prerequisite: Algebra II

Student Materials: None

continued

CORE COURSES, GRADES 11-12



MATHEMATICS, CONTINUED

Calculus

Walk in the footsteps of Newton and Leibnitz! An interactive text and graphing software make Calculus an adventure.

In this course, you'll study limits, continuity, and differentiation, as well as the 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 restaurants ordering hamburger patties, to insurance companies setting rates, to using test results to predict a student's future success. In this course, you will learn the vocabulary, method, and meaning in the statistics which exist in the world around you. Each unit provides a deep conceptual understanding, rather than memorization and emulation.

You will explore and analyze data and statistical relationships. You will complete several performance tasks that connect multiple statistical topics together. General topics of study include exploring data, planning and designing a study, anticipating patterns, and statistical inference. (1 credit)

Prerequisite: Algebra II

Student Materials: None

CORE COURSES, GRADES 11-12



SCIENCE

Biology

This course is an in-depth look at the fundamental characteristics of living organisms. It is designed to promote scientific inquiry and discovery. You 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 hands-on lab activities. Engaging in the study of biological science will broaden your picture of the world around you. (1 credit)

Prerequisite: None

Student Materials: Lab materials included in course

(See www.giantcampuswa.com/course-materials for a complete list.)

Chemistry

In this course, you will learn about the composition, properties, and changes associated with matter and their applications.

You will participate in scientific inquiry, web 2.0 tools, interactive experiences, higher order thinking, real world application in hands-on labs, and a variety of assessments. (1 credit)

Prerequisite: Algebra I or equivalent

Student Materials: Lab materials included in course

(See www.giantcampuswa.com/course-materials for a complete list.)

Physics

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.

In this course, you'll follow in the footsteps of the world's great thinkers and learn the concepts, theories, and laws that govern the interaction of matter, energy, and forces. The universal laws of physics govern everything from tiny atoms to huge galaxies with millions of stars.

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: Lab materials included in course

(See www.giantcampuswa.com/course-materials for a complete list.)

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, and 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 with all three branches of the government. You will gain a greater understanding of American history and the way that government functions at the local, state, and national levels.

This course will help you become an informed and active citizen. (.5 credit)

Prerequisite: None

Student Materials: None

Economics

Economic decisions affect us every day. 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 large groups, like businesses and governments, affect you and others. You will see how the costs and benefits of choices connect individuals and groups around the world.

This course will help you become a smart consumer who understands the flow of an economy between individuals, businesses, governments, and the rest of the world. (.5 credit)

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

Student Materials: None

American History

In this course, you will consider some of the most profound questions that thoughtful Americans still debate. You will research important events throughout American history and witness our country's development from the first settlers to today's super-power status.

You will consider issues of slavery, regulation of business, religious freedom, how to maintain a stable world order, and more. To develop your personal beliefs, you will use verified sources, including original documents and the writings of people contemporary with the events.

This course will challenge you to apply your knowledge and perspective of history to interpret the events of today. (1 credit)

Prerequisite: None

Student Materials: None

continued

CORE COURSES, GRADES 11-12

SOCIAL STUDIES, CONTINUED

World History

In this course, you will learn how people of the past are responsible for where we are today. You will take on the role of curator of the Windows of the World Museum. You will learn about the many wings of the museum as you visit the past, connect with the present, and look to the future.

Explore ancient and modern civilizations, their impact, and their contributions to today's global society. You will investigate your connections to past civilizations and prepare for your future as a participating member of a global community.

You will use 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, 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.