

Online School for Girls

Holton is proud to be able to lead the way for girls' schools by being a founding member of the Online School for Girls (OSG), a consortium of great girls' schools that have joined forces to offer exemplary online courses. Online education has grown exponentially over the last few years, with more than 1.5 million high school students taking classes online in the 2009-2010 school year. We believe that an outstanding 21st century education experience should include the ability to take online courses. Thus, we are proud to offer this innovative and unique experience to our students.

There are some special circumstances relating to OSG courses that students and parent should be aware of:

- Please note that OSG courses have twenty or fewer students in them, and thus have space limitations.
- Courses are taught by teachers from schools affiliated with the Online School for Girls. Courses are vetted by administrators from OSG member schools for quality. The course descriptions below denote the teacher of the course and the "home school" of that teacher.
- Students are not assigned a "block" in their schedule to complete OSG courses. Instead, students will have assignments and activities for the online course work to be completed on a weekly basis.
- Because of the nature of the OSG program, there is a separate Student Handbook for students taking OSG courses. Students and their parents need to read the handbook prior to beginning coursework.
- Because of the number of schools involved, the OSG courses follow a slightly different time-table than other Holton courses. The fall term begins after Labor Day and ends before winter break (with exams, if there are any) before the break. The spring term begins mid-January and is completed (including exams) before the AP exams begin in May.
- These courses are best suited for students who are good self-motivators, self-advocates, and work well independently.

Holton 11th and 12th grade students may take the following courses as elective courses. Students who take OSG courses as part of a normal five major course schedule will be able to take the courses covered through their Holton tuition and will have the grade marked on their Holton transcript. Students who decide to take the course as a sixth major course will have to pay the OSG fee for course enrollment (\$520 per semester/per course). If a student applies for and is accepted to take a sixth major course, she will still pay the OSG course fee, but will have the course marked on her Holton transcript. Students who decide to take a sixth major course through the OSG, but do not get school approval for the course, will have to pay the OSG course fee and will not have the course marked on their transcript (but will receive an additional transcript noting completion of the course from the OSG).

For further information, students and/or parents should see the OSG website (www.onlineschoolforgirls.org) and/or contact Brad Rathgeber, the Holton-Arms Director of Technology, and President of the Online School for Girls: brad.rathgeber@holton-arms.edu and 301.365.6114

A separate course enrollment sheet should be submitted with a student's course of study in order to enroll in an OSG course.

SCIOSG01 AP Computer Science Credit: 1

Grade level: 11, 12

Instructor: Kate Seyboth, Westover School

This course introduces computer science concepts including basic program form, development of algorithms, data types, control structures, and object-oriented design using the Java programming language. The course culminates with the Advanced Placement Computer Science exam.

HSSOSG01 AP Psychology Credit: 1

Grade Level: 11, 12

Instructors: Chad Sopata and Jennifer Adams, The Harpeth Hall School

The AP course in Psychology is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. In this course, students will be presented with the psychological facts, principles and phenomena contained within the major branches of psychology. A balanced examination of the following content areas: Biological Bases of Behavior, Sensation and Perception, States of Consciousness, Learning, Cognition, Motivation and Emotion, Developmental Psychology, Personality, Testing and Individual Differences, Abnormal Psychology, Treatment of Psychological Disorders and Social Psychology will provide the student with a thorough understanding of the many subfields contained within psychology and the connections between them. In addition, students will also be exposed to the history, methodology and ethical practices associated with psychological research. Upon completion of this course students will recognize the significance of psychology and its practical applications upon the world around them.

MAOSG10 Multivariable Calculus (Fall) Credit: ½

MAOSG20 Differential Equations (Spring) Credit: ½

Grade Level: 11, 12 (prerequisite: completion of Calculus BC)

Instructor: Jennifer Webster, The Harpeth Hall School

The Multivariable Calculus course will cover some topics that are not part of the AP Calculus BC curriculum, such as calculating volumes by using shells, surfaces of revolution, and centers of mass and centroids, among others. We will also explore topics that are studied in a typical college-level third semester calculus course. These include vectors and vector-valued functions, differentiation in several variables, optimization in several variables, multiple integration, and line and surface integrals.

This Differential Equations course will provide an introduction to differential equations. Topics will include: solving first-order and simple higher-order equations with applications to various scientific fields (physics, chemistry, biology, etc.); solving linear differential equations and their applications; and Laplace transform methods.

SCIOSG10 Genetics (Fall) Credit: ½

Grade Level: 11, 12

Instructor: Heather Mannella, Westover School

What makes us who we are? Is it our DNA? Our environment? How are the diseases and disorders that affect us connected to the genetic code inside each of our cells? Just because we can modify DNA, should we? Who do we approach a world in which the ability to manipulate DNA itself is now a possibility? In our rapidly advancing world of biotechnology and our increased understanding of the genetic code and how it functions, we have questions to consider that were not even a possibility 60 years ago before the discovery of DNA. This course will explore topics from the three main branches of genetic study: Transmission genetics (how traits are passed from one generation to the next), Molecular genetics (the structure, function and operation of the DNA molecule itself) and Population genetics (how traits are expressed in populations, and how those traits change over time). As a vehicle for our discussions we will look at a number of different medical topics ranging from genetic abnormalities to the study of cancer. In addition we will explore new and emerging research in the field and the social and ethical controversies and questions that often accompany these technological advances.

ARTOSG10 Art and Code (Fall) Credit: ½

Grade Level: 11, 12

Instructor: Elizabeth Perry, The Ellis School

Art and Code offers a chance to work with a new medium of expression for artists – the computer program. We will focus on learning Processing, a free computer programming language designed for artists and other non-programmers to create playful, original, beautiful or provocative interactive digital work. Through a succession of creative exercises, students will master the elements of the Processing programming language. Using those elements, students will propose and create their own final art projects. A final project may be a web-based work, but it could also be a performance or installation piece. This is not a course in how to use a

ready-made computer application, but rather a course where students will learn to create their own computer-based tools for expression. The ideal participant is a student who loves visual and /or performing arts, who is patient and persistent with her own creative process, and who wants to experiment with a new medium.

ARTOSG20 Graphic Art (Spring) Credit: ½

Grade Level: 11, 12

Instructor: Donny Yankellow, St. Paul's School for Girls

In Graphic Art, students learn the basics of Adobe Photoshop and complete several projects throughout the semester in Photoshop. Each project introduces new skills while reinforcing the skills from previous projects. Skills covered include painting in Photoshop, manipulating images, merging images, and using type as a graphic element. Students will be introduced to selection tools, layers, masking, cloning, filters and blending options to apply effects, to their images, and more. In addition to working in Photoshop, assignments will include research and brainstorming activities which will be completed online in the form of written work. Students will have the opportunity to collaborate throughout the course through various critiques. Critiques will occur in forums where students will provide feedback to each other about their work. This will include work in progress and finished assignments. At the end of the semester students will collaborate in the creation of a student art show by creating an online gallery of their work. This is an introductory art class and incorporates art concepts, typography, illustration, and portfolio development. Students will also use problem solving skills as they explore Photoshop and determine which techniques work best in which situations. At the end of this course students will have the start of a Graphic Art portfolio.

HSSOSG20 Women in Art and Literature: "Tell Me Your Diamonds" (Spring) Credit: ½

Grade Level: 11, 12 (*prerequisite:* students must have completed or currently be enrolled in a secondary level U.S. History course)

Instructors: Marsha Scherbel and Christopher Wilson, The Holton-Arms School

How do women tell their stories? "Tell me your diamonds," requests the title character in Toni Morrison's novel *Beloved*. How do women answer such calls to recount their pasts? How do they resist narratives that others have imposed on them? This course focuses on *Beloved*, which was recently named the most important work of fiction of the past twenty-five years, and explores the novel alongside thematically related examples of visual art. From paintings of heroic biblical women by seventeenth-century Italian artist Artemisia Gentileschi to Morrison's portraits of former slaves, women look at the past, comment on the present and often instigate social change. They find meaning in past experiences, including painful ones, and in the process transmute memory into art. What wisdom or warning – what diamonds? – can they offer to today's viewers and readers, especially female students?