

Countryside Montessori High School
On-Line elective course descriptions
Fall 2010

On-Line Classes are available to rising sophomores through seniors through Aventa Learning. Aventa's courses are approved through the NC Association of Independent Schools and are specifically designed to engage students. Classes are taken during a student's study hall or free period and are monitored by a Countryside teacher trained as a mentor. Mentors provide on-site support, exam proctoring, and serve as a liaison between the online teacher and Countryside. Please visit aventalearning.com for more information.

"On-line elective classes (one semester): \$300 per course

Art Appreciation

This one-semester course will introduce learners to the various forms of the visual arts, such as painting, sculpture, film, and more. Students will learn how to look at a work of art, identify and compare key characteristics in artworks, and understand the role art has played throughout history. Through hands-on activities, virtual museum tours, discussion and research, learners will develop an overall appreciation for the art they encounter in their daily lives.

Digital Video Production

This course introduces students to all aspects of digital video, from storyboarding scenes and creating shot lists to editing a finished, professional-quality product. Throughout this project-based course, students will demonstrate mastery of the key learning objectives by recording, capturing and editing their own videos. This is a hands-on course that provides a solid foundation for further study in this exciting field.

Flash Animation

This course is for anyone who wants to create animations and interactive movies like the ones used on the coolest Web sites. Participants learn how to use Flash CS3-the world's most popular animation software-to create engaging, interactive movies for the Web. Beginning with classic animation techniques, participants learn how to move objects around the screen and change their appearance. From there, it's on to creating

movies complete with original artwork. By the end of the course, participants have learned how to build interactivity into their movies and publish them to the Web. This course is a great introduction to the world of Web animation.

Game Design

This course will introduce students to the basic skills necessary for game design. They will study the various games in the industry and analyze their approach in terms of design and development. The student will explore the processes and art of making game elements like story, levels, sound, user interfaces, and levels. This analysis will include an orientation to the gaming market and innovative techniques' impact on it.

Finally, the student will merge all these elements into a functional prototype showing their understanding of the game design process.

Java Programming

This introductory-level course presents the understanding of JAVA and how to build a stand-alone application (such as a countdown clock or leap year indicator). This course is designed for first-time learners who have very little programming background except that introduced in Programming I: VB.NET. The student will also learn the techniques of JAVA, how JAVA can be used in cross-platform programming, and the robustness of the JAVA program. At the end of the course students will be able to write basic programs using JAVA and could pursue further instruction in any programming language.

Nutrition and Wellness

This half credit course is an overview of good nutrition principles that are needed for human physical and mental wellness. Discussion of digestion, basic nutrients, weight management, sports and fitness, and life-span nutrition is included. Application to today's food and eating trends, plus learning to assess for reliable nutrition information is emphasized.

Personal Finance

Understanding financial management concepts is an important life skill. From credit to insurance to taxes, it is imperative that students understand the consequences of their choices. Wisely managing their money, students become citizens that are more responsible. A thorough understanding of financial concepts, with practical application through activities and projects, will enable students to leave this course with applicable, useful skills for life.

VB.Net Programming

This course presents basic programming and teaches the essential concepts of VisualBasic.net (VB.NET). As an introduction to VB.NET, students will see the basic uses of the programming language, its similarities to the English language (and others), and its flexibility as a programming language. The course helps participants understand the processes involved in software development and object-oriented programming. This is an introductory course that could lead to careers such as software engineer, developer, or game designer. The course participants will also complete a series of hands-on projects covering built in data types, operators, control structures, classes, and objects.

Web Design

In this course students will learn the key elements of design and HTML, the concepts of planning and organizing websites, and documentation and copyright issues associated with website design. Students will progress through the course, engaging in a variety of project-based assessments to evaluate their understanding.

On-line Classes (two semesters): \$600 per course

AP Computer Science A

Computer Science A emphasizes object-oriented programming methodology with a concentration on problem solving and algorithmic development and is the equivalent of a first-semester college-level course in Computer Science. It also includes the study of data structures, design, and abstraction, but these topics are not covered to the extent that they are in Computer Science AB.

Accounting

Through this course, students gain a foundation in the skills needed for college accounting courses, office work, and managing their own small businesses. These skills are necessary for any student planning to major in Business in college. In this introduction to accounting, students who have never had prior accounting training are given an overview of the three forms of accounting: financial, cost, and management accounting.

Creative Writing

Creative Writing focuses on the four-step Process Writing model and the reading of professional writings to motivate students to create original essays, poems and short stories. The writing assignments include narration, definition, process analysis, cause and effect and comparison/contrast.

Students learn self-editing skills by following the instructor's detailed suggestions for the revision and refinement of their work

German

German meets the standards of the American Council on the Teaching of Foreign Languages (ACTFL) which calls for a method of teaching that focuses on successful communication through speaking, writing, reading, and listening, as well as a thorough grounding in aspects of culture. Course strategies include warm-up activities, vocabulary study, reading, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams.

Japanese I & II

Japanese I and II blends different forms of communication and culture via unit activities to ensure that the student meets all standards of the American Council on the Teaching of Foreign Languages (ACTFL). These standards call for teaching that focuses on successful communication through a grounding in the culture as well as speaking, writing, reading and listening. Course strategies include warm-up activities, vocabulary study, threaded discussions, multi-media presentations, self-checks, practice activities and games, oral and written assignments, projects, quizzes, and exams.

Latin

Latin I is an introduction to the basics of Latin grammar to help develop the skills necessary to translate basic sentences from Latin to English and English to Latin, and for reading simple connected passages of Latin prose and poetry. Learn how verb conjugations and noun declensions work in a highly inflected language, how to analyze the structure of Latin sentences and translate English sentences into well-formed Latin equivalents. Begin to read connected excerpts from ancient authors. Learn how verb conjugations and noun declensions work in a highly inflected language. Analyze the structure of Latin sentences and translate English sentences into well-formed Latin equivalents. And begin to read connected excerpts from ancient authors.

Mandarin (Chinese) I

This beginning level course introduces the student to a variety of areas of Mandarin Chinese. The student will learn listening, speaking, reading, and writing skills through activities that are based on pedagogically proven methods of foreign language instruction. Grammar is introduced and practiced in innovative and interesting ways with a variety of learning styles

in mind. Culture is sprinkled throughout the course in an attempt to help the learner focus on the Chinese speaking world and their culture, people, geographical locations and histories. The course is aligned to national Foreign Language standards.

Sociology

This course offers a study of human relationships in society. Additional emphasis is placed on culture, social structure, the individual in society, societal institutions and social inequality.