



Video Game Design Enrollment Fact Sheet

Program Description: Turn your passion for video games, art, graphic design or technology into a future career in the multi-billion-dollar video game industry. Did you know that many of the skills used in the production of video games are also heavily used in careers related to: forensics, security, aerospace, biotechnology, construction, digital media, health care, web design and a host of other fields. Computerized simulation and modeling are now standard techniques used in many business environments.

This class will be taught in a state-of-the-art lab in cooperation with DigiPen Institute of Technology. The Video Game Design Lab includes computer systems with 17" flat screen monitors that support DigiPen's ProjectFun video gaming software; Visual Studio 6.0; Flash MX; Adobe Photoshop 8 CS; 3D StudioMax 6; Dreamweaver 7 Mx2004; Homesite 5.5; Visual Studio 6.0; Chief Architect 9.0; Rhino 3.3; Bongo 1.1 and AutoCAD 2004.

Video Game Design integrates programming and design/animation through innovative hands-on experiences. Course content will include C++ Programming, video game development, two- and three-dimensional design and computer graphic design.

Learning Objectives: Students will demonstrate knowledge of:

1. the core elements of C++ programming language.
2. video game analysis, game design, creation of characters and their environments, low-polygon modeling, and file limitations.
3. storyboarding, sketching, rendering, animation, and program debugging.
4. video game production using a variety of software tools.
5. communication, mathematics applications (algebra, geometry, trigonometry concepts) and problem-solving skills necessary for video game development, programming or related digital communications fields.
6. the career and educational training opportunities related to video game development and design and related program areas.

Schedule: This is a two semester, yearlong course taught at Sehome High School from 7:30a.m. -- 9:25a.m. Monday – Friday. The course is “blocked” and taught by two instructors, 2 hours each day.

Eligibility: This program is offered through an interdistrict cooperative agreement with the Tech Prep Consortium's *Community Classroom* program.

- ◆ High school sophomores, juniors and seniors currently enrolled in the Bellingham School District (Sehome, Squaticum, Bellingham & Options).

- ◆ High school juniors and seniors currently enrolled at a participating Whatcom County Tech Prep Consortium high schools (Blaine, Ferndale, Lynden, Lynden Christian, Meridian, Mt. Baker, Nooksack Valley and Windward).
- ◆ Qualified juniors and seniors will be given priority in the selection process.
- ◆ Students who attend high school outside the Bellingham School District must have a signed permission from their high school to participate in the program (part of the application process).

Credits: Video Game Development and Design/Animation is a *yearlong* class. Students will earn 1.0 credit per semester (the class is a two-hour *daily* block) for at total of 2.0 credits. By enrollment in the yearlong class, students will complete the following graduation requirements:

- 1.0 Programming Credit (meets math credit or occupational credit)
- .5 Design/Animation Credit (meets fine arts or occupational credit)
- .5 Occupational Education Credit

Prerequisite: *Successful completion of a year-long Algebra class with a “C” or better grade in the coursework is required prerequisite for the class.*

The following courses are not required but recommended:

- 1 year Geometry with a “C” or better grade
- Course in computer programming, such as C++ or Visual Basic (recommended).
- Engineering design/drafting
- Introductory art and or graphic design

Application and Enrollment Process: Students may obtain program information and application materials in the counselors’ office or career center at their high school. Application materials are also posted to the Whatcom Tech Prep website: www.whatcomtechprep.org (Student section, then Community Classroom – scroll to VGD application section). Completed applications should be returned to the counselors’ office and include copies of information listed on the application checklist. Please review the application timeline and pay attention to the posted deadlines for submitting application materials. It is recommended students and their parents attend one of the Video Game Design information sessions (evening or after school – check website for more information). The VGD Program Advisory Committee will review student application materials and make recommendations regarding enrollment in the program.

Attendance and Progress Reports: Attendance will be maintained by Sehome High School. Progress reports, grades, and credit standing will be sent to the student’s home high school.

Transportation: Students will be responsible for their own transportation to/from Sehome High School.