

District name: Abbotsford

District Number: SD #34

Developed by: Bill Henderson

Date Developed: October 2006

School Name: Abbotsford Virtual School

Principal's Name: Don Martyn

Board/Authority Approval Date:

Board/Authority Signature:

Course Name: Game Design for Interactive Entertainment 12

Grade Level of Course: 12

Number of Course Credits: 4

Number of Hours of Instruction: 120

Prerequisite(s): None

Special Training, Facilities or Equipment required: This is an online course. Software (free open source) will be provided to the students at no charge.

Course Synopsis:

This course is designed to give the student a solid skill foundation in the design process and production pipeline that is typically used to design today's award winning video games. Using an industry standard design theory, students will be given hands-on training utilizing industry methodologies. Developing a diverse skillset, students will be working in a production studio environment gaining a solid understanding of storytelling, game levels, gameplay, project management, research and documentation skills and the work flow for creating a game design document. Students will gather and develop reference materials to explore and support their ability to develop an interactive story telling environment. The course is designed to first guide the student through theory and exercises which will develop their understanding of the challenge of the design process with projects increasing in complexity and challenge as the course progresses. Throughout this course students will develop communication skills that enable teams to communicate effectively via the Internet. Upon completion the students will be able to apply their knowledge to design their own games and document the design in an industry standard format.

Rationale:

Creating an actual video game is a time consuming and complex process. Successful production relies on comprehensive planning at all levels of the process. The successful designer is one who possesses a wide range of knowledge and skills related to all aspects of the production and player experience. This course is designed to give the student that solid skill foundation in the design process and production pipeline. Students will explore and develop a solid understanding of storytelling, game levels, gameplay, project management, research and documentation skills and the work flow for creating a game design document. Critical to design development is the ability for students to work and communicated as active members of a team. Students will develop their communication skills while interacting with each other via appropriate technologies available via the Internet. Upon successful completion of this course, students will be equipped to document their own designs. These design documents create the foundation upon which the game could ultimately be created.

Organizational Structure

Unit	Title	Time
Unit 1	Exploration	15
Unit 2	Pre-Production	35
Unit 3	Production	55
Unit 4	Post-Production	15
	Total Hours	120

Unit 1: Exploration

Students will be introduced to the world of video game design. Starting with a breakdown of the game development industry, students will be able to identify the key roles of all members of a production team. The evolution of game design will be examined in depth, as well as the wide variety of genres available to the aspiring designer and social issues facing today's game designs. This first unit is designed to expand the student's view of the game industry and look at video games from an analytical point of view.

Curriculum Organizer: Human Resources

It is expected that students will:

- identify the roles within a team that are required to produce a video game.
- identify the impact video games make on society.
- maintain a portfolio of recorded research discoveries and proof of concept development.
- demonstrate leadership roles within an active team.
- demonstrate actively communicating with other students on topics related to the curriculum.
- demonstrate that they are able to put the combined efforts of the team ahead of their own personal needs.
- demonstrate a pro-active approach to the importance of online safety.

Curriculum Organizer: Tools and Technologies

It is expected that students will:

- effectively use forum software to exchange ideas and comments.

Curriculum Organizer: Production Process

It is expected that students will:

- understand the work flow of the game production pipeline.

Curriculum Organizer: Artistic and Creative Direction

It is expected that students will:

- identify significant events in the history of video game design.
- demonstrate knowledge of the genres of video games.

Unit 2: Pre-Production

Students will be introduced to the various aspects of a design document and be provided with examples of strong design in the game industry. The concepts of level and game play design will be focused on, with heavy emphasis on brainstorming and documentation of any and all ideas students generate. Organizing and structure group discussions to optimize the flow of new ideas will be focused upon. The visual side of game design will be explored utilizing the creative process to create and archive thumbnail sketches and rough designs. Cataloging and sharing acquired reference materials will be examined as students realize their visions. The importance of establishing team standards (including file structure and naming conventions) will be emphasized.

Curriculum Organizer: Human Resources

It is expected that students will:

- demonstrate an ability to manage and record their time as they complete content creation activities.
- work with their mentor to develop and reach appropriate milestones.
- actively share research of masters in the field of game design and development.
- facilitate group discussions.

Curriculum Organizer: Tools and Technologies

It is expected that students will:

- maintain a sketchbook.
- digitally produce appropriate design documents.
- consistently follow applicable conventions.
- effectively use project management and asset tracking software.

Curriculum Organizer: Production Process

It is expected that students will:

- create technically correct work flow and design documentation.
- catalog reference materials as part of the design process.

Curriculum Organizer: Artistic and Creative Direction

It is expected that students will:

- research and define their own visual style.
- evaluate design concepts and provide supportive feedback.

Unit 3: Production

Students will produce their own design documents, while working in a team based production environment. The various roles of the team will begin to pull together to produce design assets such as story, concept art, and rough level/game play designs by using production software. Harnessing the power of a team, students will be given hands on experience with team work and project management strategies in a real world situation. Advanced elements of the design process such as interface and world design will be introduced as well.

Curriculum Organizer: Human Resources

It is expected that students will:

- work as a supportive member of a team working towards a common goal.

Curriculum Organizer: Tools and Technologies

It is expected that students will:

- demonstrate the role and function of the game engine.
- select and use 3D software to complete proof of concept samples.
- select and use Level Editors to complete proof of concept samples.
- select and use audio software to include sound in their game design.

Curriculum Organizer: Production Process

It is expected that students will:

- incorporate proper design document structure.
- utilize an iterative design process.

Curriculum Organizer: Artistic and Creative Direction

It is expected that students will:

- create a captivating story incorporating standard storytelling elements.
- create a unified vision from pre-production research.
- create mood and atmosphere to drive a compelling player experience.

Unit 4: Post-Production

Students will organize their development of a game idea in an attractive format. The science of promotion will be emphasized as students market their game design in a simulated developer/publisher presentation. Focusing on quality assurance, the students will document the feedback on their game design and produce a postmortem document. These documents will be shared among the student population, building on the importance of market research. By incorporating feedback, students will develop the skills needed to refine their designs to balance their ideas with the current market trends.

Curriculum Organizer: Human Resources

It is expected that students will:

- employ marketing strategies to pitch their game designs.
- directly apply feedback to refine their game design.

Curriculum Organizer: Tools and Technologies

It is expected that students will:

- analyze their personal discoveries to create a postmortem document.
- assess the value of utilizing a publisher to finance game development.
- analyze current market trends and incorporate them to their marketing campaign.

Curriculum Organizer: Production Process

It is expected that students will:

- organize and structure a focus group for feedback purposes.
- identify the importance of feedback received from focus groups to polish the final design.

Curriculum Organizer: Artistic and Creative Direction

It is expected that students will:

- create a unified marketing identity.

Instructional Components

- Online instruction
- Direct instruction
- Interactive instruction
- Modeling
- Practical creativity
- Brainstorming
- Group work
- Video podcast
- Analysis of commercially produced video game content
- Analysis of own and classmates content produced

Assessment Components

- Eighty per cent (80%) of the grade will be based on evaluations conducted throughout the course. This portion of the grade will reflect the students' most consistent level of achievement throughout the course, although special consideration will be given to the more recent evidence.
- Twenty per cent (20%) of the grade will be based on a final evaluation of each student's portfolio of content, reflection, presentation and/or an other method of evaluation suitable to the course content and administered toward the end of the course.

Type of Assessment	Category	Details	Weighting (%)
Formative (80%)	Practical Applications	Online portfolio	65
	Self-Rating Scale	Online blog	15
Summative (20%)	Final Assessment	Final portfolio	10
		Reflection and Presentation	10
Total			100%

Performance Methods

- Project proposal outline
- Projects
- Online portfolio
- Portfolio and Asset evaluation
- Presentation of completed works
- Online portfolio

Personal Communications

- Group dialogue
- Student/instructor/mentor dialogue
- Blog reflection
- Self evaluation
- Peer evaluation

Other

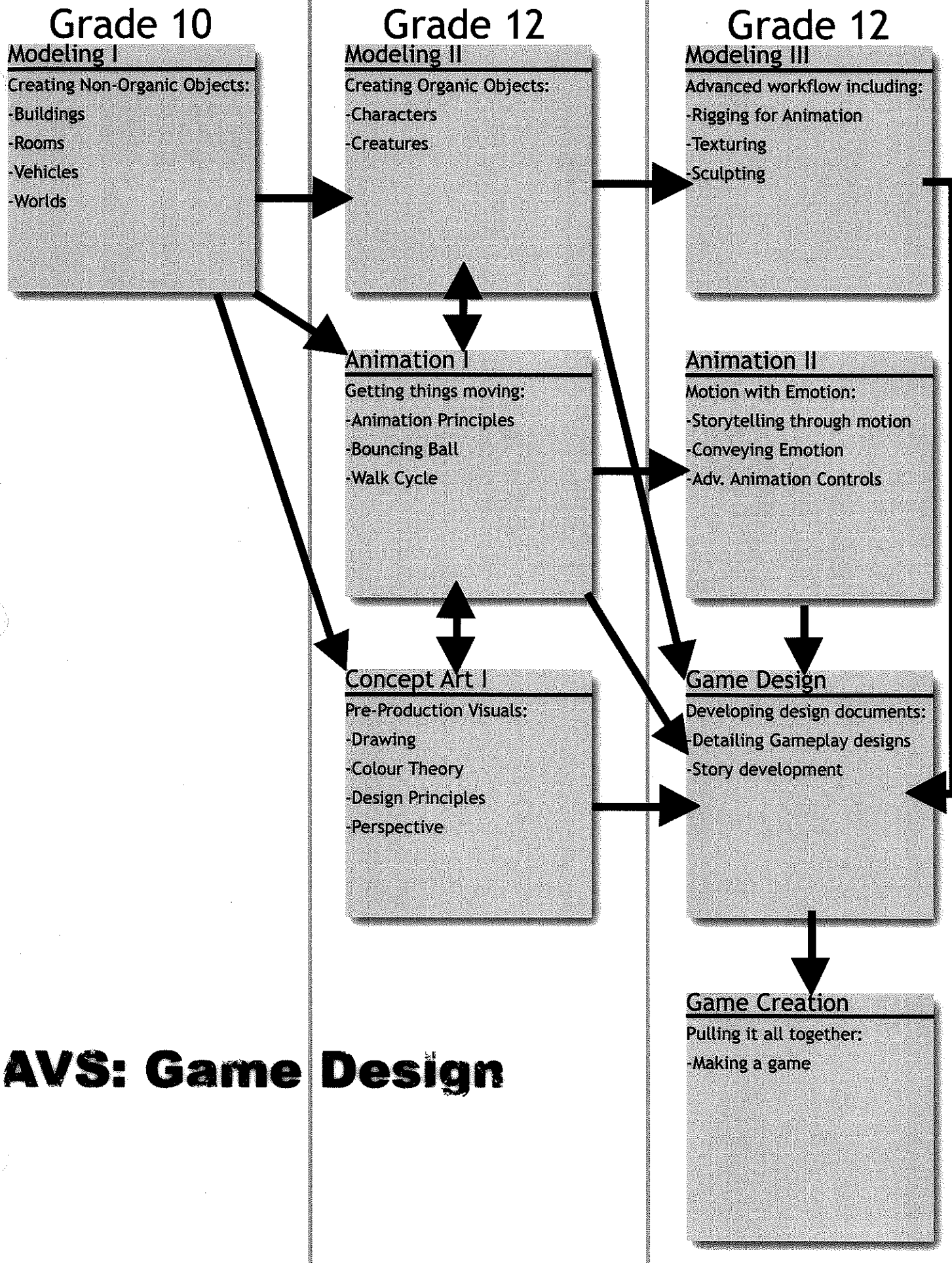
- Bi-monthly assessment
- Teacher anecdotal records
- Teacher log
- Checklists
- Rubrics
- Rating scales

Learning Resources

- Modeling Software (Open Source Software - free to students and school)
- Visit to game production company
- Articles, information and online communities on the Internet
- Teaching Gamecraft, Daughtry et al, Mesmer, 2003 (free distribution)
- The Game Production Handbook, Heather Chandler, Charles River Media, 2006

Additional Course Information:

This is a new course, building upon the success of program previously offered at Robert Bateman Secondary School, and building upon the standards established by the US National Skill Standards Board. The course developer is closely connected to the commercial interactive game development community within British Columbia. This course is the first of a series of eight planned courses in this area of study and employment. Students will need adequate computer equipment and Internet access to complete this course. This should not be a problem, as the same equipment is required to participate in a distributed learning program.



AVS: Game Design