



# Video Game Analysis & Technical Design

## Video Game Design & Development + Internship

### Course Outline:

**Course Code:** VGTD  
**Course Name:** Video Game Analysis & Technical Design  
**Length:** 100 Hours – 20 Days  
**Instructor:** Ross Driedger  
**Email:** [Ross.driedger@trios.com](mailto:Ross.driedger@trios.com) CC: [ross@earz.ca](mailto:ross@earz.ca)

**Revision:** Version 1.1 – April 2013

### Course Description:

This course introduces students to the historical development of video games and the social and cultural affects video games have on society. An analysis of existing video game mechanics, technical design and implementation will allow students to approach video game development from a technical perspective. Moreover, this course discusses business models, project/team management techniques and industry relationships necessary to manage large scale video game development.

### Course Performance Objectives:

#### *Knowledge*

1. Define historical video games that have impacted the video game industry
2. Understand the core structures and procedures involved in video game production
3. Identify the important design features and core mechanics of a video game
4. Prepare the appropriate video game documentation
5. Understand the business and Intellectual Property (IP) aspects of video game development

#### *Skills*

1. Analyze existing video games and identify their key features and core mechanics
2. Discuss the key features of each video game genre
3. Create a game concept and pitch
4. Prepare GDD and TDD documentation
5. Analyze and prepare contracts, business plans, schedules, and marketing plans for a video game concept



# Video Game Analysis & Technical Design

## Video Game Design & Development + Internship

### Student Course Resources:

**Textbook(s):** Introduction to the Video Game Industry & Video Game Technical Design  
triOS Courseware 2012

**Software:** Microsoft Office Suite  
Microsoft Visio

### Course Evaluation Method:

**Tests (4)** 30%

**Final Project** 60%

**Professional Performance\*** 10%

- Professional performance includes attendance, punctuality, participation in class, completion of all assignments & class preparation.

### Evaluation Scale:

**A** 100 – 90 %  
**D** 69 – 60 %

**B** 89 – 80 %  
**F** 59 – 0 %

**C** 79 – 70 %

- Student that miss tests or final project submission due to medical reasons and can provide a doctor's note will be given a chance for resubmission at a later date to be determined.
- The consequence for submitting a plagiarized purchased or in any manner inappropriately negotiated or falsified test, project, or any evaluated material is a grade of zero on the material.



## Video Game Analysis & Technical Design

### Video Game Design & Development + Internship

#### Daily Plan At a Glance Outline:

WEEK 1				
Criteria \ DAY	DAY 1	DAY 2	DAY 3	DAY 4
Lecture	History of Video Games	The Design Process & Rules of Play	Gameplay & Core Mechanics	Action, Strategy, RPG & Sport Games
Activity	Ch.1 Exercises	Ch.2 Exercises Start Final Project	Ch.3 Exercises	Ch.4 Exercises
Reading	Ch.1 Ch.1PPTs	Ch.2 Ch.2 PPTs	Ch.3 Ch.3 PPTs	Ch.4 Ch.4 PPTs
DAY 5				
Test 1	<ul style="list-style-type: none"><li>Day 1 – 4 Comprehensive Test</li></ul>			
Activity	<ul style="list-style-type: none"><li>Exercise Completion</li><li>Final Project Milestones</li></ul>			



## Video Game Analysis & Technical Design

### Video Game Design & Development + Internship

#### Daily Plan At a Glance Outline:

WEEK 2				
Criteria \ DAY	DAY 6	DAY 7	DAY 8	DAY 9
Lecture	Simulation, Adventure, Puzzle, and Online Games	Documenting the Idea & GDDs	TDDs, ADDs & UML	Teams & Engineering
Activity	Ch.5 Exercises	Ch.6 Exercises	Ch.7 Exercises	Ch.8 Exercises
Reading	Ch.5 Ch.5 PPTs	Ch.6 Ch.6 PPTs	Ch.7 Ch.7 PPTs	Ch.8 Ch.8 PPTs
DAY 10				
Test 2	<ul style="list-style-type: none"><li>Day 6 – 9 Comprehensive Test</li></ul>			
Activity	<ul style="list-style-type: none"><li>Exercise Completion</li><li>Final Project Milestones</li></ul>			



## Video Game Analysis & Technical Design

### Video Game Design & Development + Internship

#### Daily Plan At a Glance Outline:

WEEK 3				
Criteria \ DAY	DAY 11	DAY 12	DAY 13	DAY 14
Lecture	Production Flow, Roles & Contracts	Cycles, Risk, Post-mortems & QA Testing	Startups & Budgeting	IP & Marketing
Activity	Ch.9 Exercises	Ch.10 Exercises	Ch.11 Exercises	Ch.12 Exercises
Reading	Ch.9 Ch.9 PPTs	Ch.10 Ch.10 PPTs	Ch.11 Ch.11 PPTs	Ch.12 Ch.12 PPTs
DAY 15				
Test 3	<ul style="list-style-type: none"><li>Day 11 – 14 Comprehensive Test</li></ul>			
Activity	<ul style="list-style-type: none"><li>Exercise Completion</li><li>Final Project Milestones</li></ul>			



## Video Game Analysis & Technical Design

### Video Game Design & Development + Internship

Daily Plan At a Glance Outline:

WEEK 4				
Criteria \ DAY	DAY 16	DAY 17	DAY 18	DAY 19
Activity	Project Milestone Completion	Project Milestone Completion	Project Milestone Completion	Project Milestone Completion
Reading	Ch.1-12	Ch.1-12	Ch.1-12	Ch.1-12
DAY 20				
Activity	<ul style="list-style-type: none"><li>Complete All Milestones &amp; Submit Final Project</li></ul>			