

COURSE OUTLINE		
<b>TERM:</b> Spring 2020	<b>COURSE NO:</b> VFX 215	
<b>INSTRUCTOR:</b>	<b>COURSE TITLE:</b> Visual Effects Production II	
<b>OFFICE:</b> <b>LOCAL:</b> <b>E-MAIL:</b> @capilanou.ca	<b>SECTION NO(S):</b>	<b>CREDITS:</b> 9
<b>OFFICE HOURS:</b>		
<b>COURSE WEBSITE:</b>		

Capilano University acknowledges with respect the Lil'wat, Musqueam, Squamish, Sechelt, and Tseil-Waututh people on whose territories our campuses are located.

### COURSE FORMAT

Nine hours of class time, plus an additional three hours delivered through on-line or other activities for a 15-week semester, which includes two weeks for final exams.

### COURSE PREREQUISITES

42 VFX credits

### CALENDAR DESCRIPTION

In this co-taught course, students will be introduced to the fundamentals of scripting in a production environment while continuing to iterate and advance their compositing, effects, and 3d modeling, shading and lighting techniques. Self-reliance, problem solving, critical analysis and finding answers in available resources will be emphasized.

### REQUIRED TEXTS AND/OR RESOURCES

Resource material will be provided by the instructor/s.

### COURSE STUDENT LEARNING OUTCOMES

**On successful completion of this course, students will be able to do the following:**

- Create a Mind Map to identify tasks required to complete Demo reel;
- Create a Production Schedule for Demo reel;
- Perform actions in the Maya interface, then use the resulting output script as a starting point to write original scripts (computer program);
- Write a plain English outline for a tool as part of developing the strategy for writing the actual code;
- Create User defined functions in the Python scripting language;
- Demonstrate practical skills researching script based solutions to Production requirements;
- Build a Production tool with a modular structure;
- Iterate upon existing compositing, effects and 3D generalist skills to advance portfolio quality.

## COURSE CONTENT

### Week 1

- Time Management Techniques
- Creating a Mind Map to Identify specific tasks required to complete Demo reel
- *Assignment 1: Create Mind Map and Production Schedule -- Due beginning of Class 3*
- Advanced Compositing, Modeling and Effects

### Week 2

- Copy and Paste Scripting: AutoLight Tool (in MEL)
- Advanced Compositing, Modeling and Effects

### Week 3

- Time Management Techniques follow up
- *Assignment 1 Due*
- Advanced Compositing, Modeling and Effects

### Week 4

- Converting MEL to PYTHON: AutoLight tool (in PYTHON)
- Advanced Compositing, Modeling and Effects

### Week 5

- Intro to variables: AutoLight tool with variables
- Advanced Compositing, Modeling and Effects

### Week 6

- Modularizing tools
- Working with Modules and user defined functions: OVERBURN TOOL
- *Assignment 2: Build Custom Tool, -- Outline due class 7, tool due class 9*
- Advanced Compositing, Modeling and Effects

### Week 7

- Scripting in NUKE
- Scripting in HOUDINI
- Advanced Compositing, Modeling and Effects

### Week 8

- Getting, and Using info from your scene
- Basic Skeleton and Controls creation
- Advanced Compositing, Modeling and Effects

### Week 9

- Reading Contents of File Directories:

- Importing and modifying assets
- Advanced Compositing, Modeling and Effects

### Week 10

- Tracing Node Network Connections:
- Shader Assignment
- Advanced Compositing, Modeling and Effects

### Week 11

- Math Nodes vs Expressions
- Creating Procedural Animation Rig (noise nodes for shake, math nodes for wheel rotation)
- Advanced Compositing, Modeling and Effects

### Week 12

- Intro to GUIs: Building a Graphical User Interface to run tool from
- *Assessment 3: Build a tool that runs from a GUI -- Due Class 14*
- Advanced Compositing, Modeling and Effects

### Week 13

- Automating Your Tool
- Building variants and rendering/storing results in webpage and database.
- Advanced Compositing, Modeling and Effects

### Week 14

- Using scripting to respond to Last minute Client demands!!!
- Advanced Compositing, Modeling and Effects

### Week 15

- Writing BAT Files
- Advanced Compositing, Modeling and Effects

### EVALUATION PROFILE

Assignment 1	20%
Assignment 2	20%
Assignment 3	25%
Assignment 4	25%
<u>Professionalism</u>	<u>10%</u>

**Total**                      **100%**

### Professionalism

Students will be evaluated on the quality, frequency and relevance of their comments, questions, observations and discussions of weekly course content; on their active engagement in in-class assignments; on their completion of required lab hours (if any) and on their work-in-progress.

- i. Knowledge of reading / assignments
- ii. Attendance
- iii. Active engagement in class discussions.
- iv. Frequency and quality of comments, questions, observations.
- v. Attendance of supervised Labs.

## GRADING PROFILE

A+ = 90-100	B+ = 77-79	C+ = 67-69	D = 50-59
A = 85-89	B = 73-76	C = 63-66	F = 0-49
A- = 80-84	B- = 70-72	C- = 60-62	

### Incomplete Grades

Grades of Incomplete "I" are assigned only in exceptional circumstances when a student requests extra time to complete their coursework. Such agreements are made only at the request of the student, who is responsible to determine from the instructor the outstanding requirements of the course.

### Late Assignments

Assignments are due at the beginning of the class on the due date listed. If you anticipate handing in an assignment late, please consult with your instructor beforehand.

### Missed Exams/Quizzes/Labs etc.

Make-up exams, quizzes and/or tests are given at the discretion of the instructor. They are generally given only in medical emergencies or severe personal crises. Some missed labs or other activities may not be able to be accommodated. Please consult with your instructor.

### Attendance

Students are expected to attend all classes and associated activities. A student missing more than three classes without an acceptable reason will not receive credit for completing the course.

### English Usage

Students are expected to proofread all written work for any grammatical, spelling and stylistic errors. Instructors may deduct marks for incorrect grammar and spelling in written assignments.

### Electronic Devices

Students may use electronic devices during class for note-taking only, unless otherwise authorized by the instructor.

### On-line Communication

Outside of the classroom, instructors will (if necessary) communicate with students using either their official Capilano University email or Moodle; please check both regularly. Official communication between Capilano University and students is delivered to students' Capilano University email addresses only.

## UNIVERSITY OPERATIONAL DETAILS

### Tools for Success

Many services are available to support student success for Capilano University students. A central navigation point for all services can be found at: <http://www.capilanou.ca/services/>

**Capilano University Security: download the [CapU Mobile Safety App](#)**

### Policy Statement (S2009-06)

Capilano University has policies on Academic Appeals (including appeal of final grade), Student Conduct, Academic Integrity, Academic Probation and other educational issues. These and other policies are available on the University website.

### Academic Integrity (S2017-05)

Any instance of academic dishonesty or breach of the standards of academic integrity is serious and students will be held accountable for their actions, whether acting alone or in a group. See policy S2017-05 for more information: <https://www.capilanou.ca/about-capu/governance/policies/>.

Violations of academic integrity, including dishonesty in assignments, examinations, or other academic performances, are prohibited and will be handled in accordance with the Student Academic Integrity Procedures.

**Academic dishonesty** is any act that breaches one or more of the principles of academic integrity. Acts of academic dishonesty may include but are not limited to the following types:

**Cheating:** Using or providing unauthorized aids, assistance or materials while preparing or completing assessments, or when completing practical work (in clinical, practicum, or lab settings), including but not limited to the following:

- Copying or attempting to copy the work of another during an assessment;
- Communicating work to another student during an examination;
- Using unauthorized aids, notes, or electronic devices or means during an examination;
- Unauthorized possession of an assessment or answer key; and/or,
- Submitting of a substantially similar assessment by two or more students, except in the case where such submission is specifically authorized by the instructor.

**Fraud:** Creation or use of falsified documents.

**Misuse or misrepresentation of sources:** Presenting source material in such a way as to distort its original purpose or implication(s); misattributing words, ideas, etc. to someone other than the original source; misrepresenting or manipulating research findings or data; and/or suppressing aspects of findings or data in order to present conclusions in a light other than the research, taken as a whole, would support.

**Plagiarism:** Presenting or submitting, as one's own work, the research, words, ideas, artistic imagery, arguments, calculations, illustrations, or diagrams of another person or persons without explicit or accurate citation or credit.

**Self-Plagiarism:** Submitting one's own work for credit in more than one course without the permission of the instructors, or re-submitting work, in whole or in part, for which credit has already been granted without permission of the instructors.

**Prohibited Conduct:** The following are examples of other conduct specifically prohibited:

- Taking unauthorized possession of the work of another student (for example, intercepting and removing such work from a photocopier or printer, or collecting the graded work of another student from a stack of papers);
- Falsifying one's own and/or other students' attendance in a course;
- Impersonating or allowing the impersonation of an individual;
- Modifying a graded assessment then submitting it for re-grading; or,
- Assisting or attempting to assist another person to commit any breach of academic integrity.

### **Sexual Violence and Misconduct**

All Members of the University Community have the right to work, teach and study in an environment that is free from all forms of sexual violence and misconduct. Policy B401 defines sexual assault as follows:

Sexual assault is any form of sexual contact that occurs without ongoing and freely given consent, including the threat of sexual contact without consent. Sexual assault can be committed by a stranger, someone known to the survivor or an intimate partner.

Safety and security at the University are a priority and any form of sexual violence and misconduct will not be tolerated or condoned. The University expects all Students and Members of the University Community to abide by all laws and University policies, including <https://www.capilanou.ca/about-capu/governance/policies/>).

**Emergencies:** Students are expected to familiarise themselves with the emergency policies where appropriate and the emergency procedures posted on the wall of the classroom.

### **DEPARTMENT OR PROGRAM OPERATIONAL DETAILS**

Visual effects lab hours are offered outside of class times throughout the year. They offer an opportunity for students to work one on one with qualified individuals to sort through exercises, assignments and projects that arise as a result of class deliverables. While attendance is not mandatory, there is a departmental expectation that students attend as many labs as they can in order to maximize learning opportunities.