

UNIVERSITY OF CALGARY FACULTY OF ARTS

DEPARTMENT OF ART AND ART HISTORY

ART 315 Programming for Artists
Fall 2021

Course Delivery Format:	In person
Instructor: Office: Email: Office Hours: TA Name and Email:	Dr. J. R. Parker AB 606 iparker@ucalgary.ca Mon 1-2 PM Tue 1-2 PM or by request None
Day(s), time(s) and location of class:	Lecture 1: Mondays & Wednesdays 2:00 - 3:15 Lab 1: Mondays & Wednesdays 3:15-4:30 Venue: SS 018
Course description:	An introduction to computers and programming within the context of artistic practice. Algorithms within the arts domain, and applications, including interactive and dynamic applications, across range of artistic practices including: images, audio, animation, multimedia, web, and installations. Students will develop in-class and take-home projects, as well as a final project of their own design. This course, at this time, uses the Processing language.
Prerequisites and/or co- requisites:	One half-course in Art or consent of the Department.
Course Objectives:	Upon successful completion of this course, students should: 1. Be able to write basic programs in Processing; 2. Understand the ideas behind generative art, and the use of algorithms in a creative process; 3. Be able to create artistic works using these paradigms in a specified language; 4. Be familiar with basic techniques in visualization using a computer; 5. Understand basic strategies for interaction design and their implementation; 6. Understand how to create and manipulate computer images.
Required Textbooks of Readings:	All readings are suggested. There is no required text for this class. Parker, J.R. Generative Art: Algorithms as Artistic Tool, Durvile Publications Reas, C. and McWilliams, C., LUST. FORM+CODE in Design, Art, and Architecture. Princeton Architectural Press, New York. 2010. Shiffman, D. Learning Processing - A beginner's guide to programming images, animation, and interaction. Morgan Kaufmann Burlington, MA. 2008. Parker, J. An introduction to Game Development Using Processing. Mercury
	Learning & Information, 2014. http://www.amazon.ca/Introduction-Game-Development-Using-Processing/dp/1937585409
Course Schedule:	 Introduction. Tools, generative art Processing. Geometry. Computers. Lines, drawing. Algorithms. IF

5. Loops. Drawing pixels. FOR. WHILE
6. Animation, motion.
7. Arrays.
8. Style. 2D Arrays.
9. Images.
10. Advanced pixels – particles, image processing
11. Three dimensions
12. Audio, video
13 Games
Your projects You will have the whole semester to build a generative art piece. These will
be shown to the class and assessed in the last week.

Assignments & Evaluation

Assignment		Description	Due Date	Worth
Assignment 1		Mondrean (Create art in the style of Piet Mondrean)	Oct 1	8%
Assignment 2		Paint (Build a simple paint program)	Oct 22	8%
Assignment 3		Animation (Procedural animation of an object)	Nov 15	9%
Assignment 4		Game (a playable computer game with sound)	Dec 1	10%
In-Class assignments		Based on the class material that week.	-	35%
Generative art project		Student choice	Dec 8	30%
	Missed or Late Assignments: Some assignments may be resubmitted. Late assignments can be accepted if prior arrangements are made. Expectations for Writing: Writing skills are important to academic study across all disciplines. Any written work needs to meet English grammatical rules and reasonable standards for composition.			tten work
Additional Costs and Information:	A laptop would	be useful.		
Portfolios and Assignments:	The Dept of Art and Art History will not assume responsibility for lost or stolen portfolios or course work given to instructors for grading.			

Other Important Dates

Last day to drop course without financial penalty	Thursday, September 16
End of refund period	Thursday, September 16
Last day to add/swap course	Friday, September 17
Tuition and fee payment deadline	Friday, September 24
Last day to withdraw from course	Thursday, December 9

Grading Method and Grading Scale

Percentage	Grade	G.P.V.	Grade Definition	
96-100	A+	4.0	Outstanding	
90-95	А	4.0	Excellent-superior performance, showing comprehensive understanding of subject matter.	
85-89	A-	3.7		
80-84	B+	3.3		
75-79	В	3.0	Good – clearly above average performance with knowledge of subject matter generally complete.	
70-74	B-	2.7		
65-69	C+	2.3		
60-64	С	2.0	Satisfactory – basic understanding of the subject matter.	
55-59	C-	1.7		
53-54	D+	1.3		
50-52	D	1.0	Minimal pass – marginal performance; generally insufficient preparation for subsequent courses in the same subject.	
0-49	F	0	Fail – unsatisfactory performance or failure to meet course requirements.	

Learning Technologies and Requirements:	There is a D2L site for this course which contains required readings and other relevant class resources and materials (d2L.ucalgary.ca).		
	To successfully engage in their learning experiences at the University of Calgary, students taking online, remote, and blended courses are required to have reliable access to the following technology:		
	 A computer with a supported operating system, as well as the latest security, and malware updates 		
	A current and updated web browser		
	Webcam (built-in or external)		
	Microphone and speaker (built-in or external) or headset with microphone		
	Current antivirus and/or firewall software enabled		
	Broadband internet connection		
Campus Mental Health	SU Wellness Centre and the Campus Mental Health Strategy		
Resources:	Counselling and mental health support services are offered through Student Wellness		
	Services. During COVID-19, you can access counselling services remotely via Skype for		
	Business, Microsoft Teams and telephone. Single Session Counselling appointments are		
	available on a bookable basis. Book an appointment online or call 403-210-9355.For		
	access to mental health support, email sar@ucalgary.ca . If you are a student in immediate distress, please contact the centre's after-hours partners:		

Call 403-266-4357, available 24/7.

weekdays and 12–10 p.m. on weekends.

• Visit the Distress Centre website to access online chat from 3–10 p.m. on

The Distress Centre:

 dditional crisis support from Wood's Homes Community Support Team: Call 403-299-9699 or 1-800-563-6106, available 24/7. Text 587-315-5000 between 9 a.m. and 10 p.m. Visit Wood's Homes website for live chat between 9 a.m 10 p.m.
ore information go to http://www.ucalgary.ca/pubs/calendar/current/f.html
ne student's responsibility to request academic accommodations according to the ersity policies and procedures listed below. The Student Accommodations policy is able at https://ucalgary.ca/student-services/access/prospective-students/academic-nmodations .
ents needing an accommodation based on disability or medical concerns should ct Student Accessibility Services (SAS) in accordance with the Procedure for mmodations for Students with Disabilities (https://ucalgary.ca/legal-res/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-lilities-Procedure.pdf). Students who require an accommodation in relation to their ework based on a protected ground other than Disability should communicate this in writing to their Instructor.
vill process the request and issue letters of accommodation to instructors. For ional information on support services and accommodations for students with ilities, visit www.ucalgary.ca/access/
emic Misconduct refers to student behavior which compromises proper assessment tudent's academic activities and includes: cheating; fabrication; falsification; arism; unauthorized assistance; failure to comply with an instructor's expectations ding conduct required of students completing academic assessments in their es; and failure to comply with exam regulations applied by the Registrar.
fore information go to //www.ucalgary.ca/pubs/calendar/current/k.html rp://www.ucalgary.ca/pubs/calendar/current/e-2.html ional information is available on the Academic Integrity Website ps://ucalgary.ca/student-services/student-success/learning/academic-integrity
se of laptop and mobile devices is acceptable when used in a manner appropriate to ourse and classroom activities. Please refrain from accessing websites and resources may be distracting to you or for other learners during class time.
ents are responsible for being aware of the University's Internet and email use policy, a can be found at https://ucalgary.ca/legal-res/sites/default/files/teams/1/Policies-Acceptable-Use-of-Electronic-Resources-and-mation-Policy.pdf
ore information about deferring a final exam go to c://www.ucalgary.ca/registrar/exams/deferred-exams
fore information about deferral of term work go to //www.ucalgary.ca/pubs/calendar/current/g-7.html ://www.ucalgary.ca/live-uc-ucalgary- ites/default/files/teams/14/deferred_termwork-feb-2020_revised.pdf
udents are required to read the University of Calgary policy on Acceptable Use of rial Protected by Copyright (

	Copyright-Policy.pdf) and requirements of the copyright act (https://laws-lois.justice.gc.ca/eng/acts/C-42/index.html) to ensure they are aware of the consequences
	of unauthorized sharing of course materials (including presentations, textbooks, posted
	notes, labs, case studies, assignments, and exams).
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	Students who use material protected by copyright in violation of this policy may be
	disciplined under the Non-Academic Misconduct Policy
	https://www.ucalgary.ca/pubs/calendar/current/k.html
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Freedom of Information and	Student information will be collected in accordance with typical (or usual) classroom
Protection of Privacy:	practice. Students' assignments will be accessible only by the authorized course faculty.
	Private information related to the individual student is treated with the utmost regard by
	the faculty at the University of Calgary.
	For more information go to https://www.ucalgary.ca/registrar/student-centre/privacy-
	policy
	Joney
Ethics	Whenever you perform research with human participants (i.e., surveys, interviews, or
	observation) as part of your university studies, you are responsible for following
	university research ethics guidelines. Your instructor must review and approve of your
	research plans and supervise your research.
	For more information go to http://www.ucalgary.ca/pubs/calendar/current/e-5.html
	or https://www.ucalgary.ca/research/researchers/ethics-compliance/chreb
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Additional Student Support:	Please visit this link for important information on UCalgary's student wellness and safety
	resources: https://www.ucalgary.ca/registrar/registration/course-outlines
Models:	N/A
Wodels.	
Studio Procedures:	Students will have to respect Covid-19 specific procedures pertaining to the lab location.
	These include circulation patterns, user policy, distancing and keeping the lab space clean
	and tidy.
	In addition, students and instructors are expected to follow physical distancing regulations
	to comply with the University's Covid-19 Re-Entry Protocols. For more information, please
	refer to the following website:
	https://ucalgary.ca/risk/sites/default/files/2020-
	05/UCalgary.COVID19.ReEntryProtocols.pdf
	ds/ ocalgary.covib15.ReEntryFrotocois.pur
Emergency Evacuation:	For more information go to https://www.ucalgary.ca/risk/emergency-management/evac-
	<u>drills-assembly-points/assembly-points</u>
Arts Students' Centre	Have a question but not sure where to start? The Arts Students' Centre is your information
Program Advising	resource for everything in the Faculty of Arts. Call us at 403-220-3580 or email us at
1 Togram Auvising	ascarts@ucalgary.ca.
	assures as a superior and a superior
	You can also visit the Faculty of Arts website at http://arts.ucalgary.ca/undergraduate
	which has detailed information on common academic concerns.