

Course Delivery Format:	<i>In-person</i>
Instructor: Office: Email: Office Hours: TA Name and Email:	<i>J R Parker</i> <i>AB 606 (403 220 6784)</i> jparker@minkhollow.ca <i>Wed 11 AM Thu 1 PM</i>
Day(s), time(s) and location of class:	<i>MW 8:30-9:45 (Lecture)</i> <i>MW 9:45-11:00 (Lab)</i> <i>Location: AB 628 & AB 626</i>
Course description:	Theoretical and practical applications of basic electronic principles and techniques involving the use of electronics in contemporary art practices. Will include applied experiences with hardware and visual programming environments.
Prerequisites and/or co-requisites:	<i>3 units of courses labelled Art.</i>
Course Objectives:	<p>Some modern artworks (installations, some performance art) use electricity or electronics as an enabling technology. Knowledge of electronics will help an artist imagine and design such works, and practical knowledge of parts and construction methods will allow an artist to undertake these projects without technical assistance. The material presented in this course will allow an artist to design and build artworks that feature electronics. In particular, upon successful completion of this course students will:</p> <ol style="list-style-type: none"> 1. Understand the basic properties of electricity and the properties of electronic components. 2. Be able to design electronic circuits that control lights and sounds. 3. Understand how to use resistors, capacitors, diodes and transistors. 4. Have a basic knowledge of digital circuit components and design. 5. Be able to use transducers like LEDs, microphones, photodiodes/phototransistors, and others.
Required Textbooks or Readings:	
Course Schedule:	Lecture schedule will be available at http://www.minkhollow.ca/Art317

Assignments & Evaluation

Assignment	Description	Due Date	Worth
Studio assignments		Each Week	45%
Project 1	Art project involving electronics as a subject. A	Feb 24	15%

	painting, a drawing, a sculpture, etc. (Feb 24)		
Project 2	Electronic art project of your choice.	Apr 20	15%
4 Critical incident questionnaires		Jan 24, Feb 28, Mar 21, Apr 18.	10%
Final take-home exam.		Apr 25	15%
Registrar Scheduled Final Exam:	NONE		
Assessment expectations:	<p><u>Guidelines for Submitting Assignments:</u> Please hand in your assignments directly to your instructor via Email or other agreed on on-line mechanism. If this is not possible, you can use the drop box outside of AB 608. Assignments that are put into the drop box will be date-stamped and placed in the instructor's mailbox.</p> <p><u>Missed or Late Assignments:</u> <i>There are no fixed deadlines except for the critical incident questionnaires, but students are expected to keep current.</i></p> <p><u>Expectations for Writing:</u> Writing skills are important to academic study across all disciplines. Consequently, instructors may use their assessment of writing quality as a factor in the evaluation of student work. Please refer to the Undergraduate Calendar E.2 Writing Across the Curriculum policy for details.</p>		
Additional Costs and Information:	<p>Web site and online notes. http://www.minkhollow.ca/Art317</p> <p><i>Students will be responsible for any parts and supplies related to their individual projects.</i> <i>The studio has a collection of tools and parts to fill in gaps.</i></p> <p>1. Arduino project kit.</p> <p>The department has a few for sale for about \$30.00. You will need a campus card.</p> <p>Here's a link to the standard kit: https://www.amazon.ca/Elegoo-Project-Starter-Tutorial-Arduino/dp/B01D8KOZF4/ref=sr_1_5?dchild=1&keywords=arduino+kit&qid=1601833804&sr=8-5</p> <p>ELEGOO UNO Project Super Starter Kit</p> <p>An option is: https://www.amazon.ca/Smraza-Tutorials-Compatible-MEGA2560-Components/dp/B06XXYVWVJ/ref=sr_1_13?dchild=1&keywords=arduino+kit&qid=1601833804&sr=8-13 Smraza Super Starter Kit Compatible with Arduino</p> <p>You will need a multimeter:</p>		

	https://www.banggood.com/ANENG-AN8206-Large-Screen-Digital-Multimeter-with-Square-Wave-Output-Voltage-Current-Continuity-Measurement-hEF-measurement-p-1592649.html?rmmds=search&ID=224&cur_warehouse=CN https://www.goldmine-elec-products.com/prodinfo.asp?number=C9008 Super Range DT820D Accurate Digital Multimeter Circuit simulation software is free: https://www.ti.com/tool/TINA-TI and https://sourceforge.net/projects/circuit/ Other tools such as pliers and wire cutters can be found at any department store (Canadian Tire, etc)
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, January 20
End of refund period	Thursday, January 20
Last day to add/swap course	Friday, January 21
Tuition and fee payment deadline	Friday, January 28
Last day to withdraw from course	Tuesday, April 12

Grading Method and Grading Scale

Percentage	Grade	G.P.V.	Grade Definition
96-100	A+	4.0	Outstanding
90-95	A	4.0	Excellent-superior performance, showing comprehensive understanding of subject matter.
85-89	A-	3.7	
80-84	B+	3.3	
75-79	B	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	C	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:	<p>There is a D2L site for this course which contains required readings and other relevant class resources and materials (d2L.ucalgary.ca).</p> <p>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:</p> <ul style="list-style-type: none"> • 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 Resources:	<p>SU Wellness Centre and the Campus Mental Health Strategy</p> <p>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:</p> <p>The Distress Centre:</p> <ul style="list-style-type: none"> • Call 403-266-4357, available 24/7. • Visit the Distress Centre website to access online chat from 3–10 p.m. on weekdays and 12–10 p.m. on weekends. <p>For additional crisis support from Wood's Homes Community Support Team:</p> <ul style="list-style-type: none"> • 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.
Academic Standing:	For more information go to http://www.ucalgary.ca/pubs/calendar/current/f.html
Academic Accommodation:	<p>It is the student's responsibility to request academic accommodations according to the University policies and procedures listed below. The Student Accommodations policy is available at https://ucalgary.ca/student-services/access/prospective-students/academic-accommodations.</p> <p>Students needing an accommodation based on disability or medical concerns should contact Student Accessibility Services (SAS) in accordance with the Procedure for Accommodations for Students with Disabilities (https://ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Accommodation-for-Students-with-Disabilities-Procedure.pdf). Students who require an accommodation in relation to their coursework based on a protected ground other than Disability should communicate this need in writing to their Instructor.</p> <p>SAS will process the request and issue letters of accommodation to instructors. For additional information on support services and accommodations for students with disabilities, visit www.ucalgary.ca/access/</p>

Academic integrity, plagiarism:	<p>Academic Misconduct refers to student behavior which compromises proper assessment of a student's academic activities and includes: cheating; fabrication; falsification; plagiarism; unauthorized assistance; failure to comply with an instructor's expectations regarding conduct required of students completing academic assessments in their courses; and failure to comply with exam regulations applied by the Registrar.</p> <p>For more information go to http://www.ucalgary.ca/pubs/calendar/current/k.html or http://www.ucalgary.ca/pubs/calendar/current/e-2.html Additional information is available on the Academic Integrity Website at https://ucalgary.ca/student-services/student-success/learning/academic-integrity</p>
Internet and electronic communication device:	<p>The use of laptop and mobile devices is acceptable when used in a manner appropriate to the course and classroom activities. Please refrain from accessing websites and resources that may be distracting to you or for other learners during class time.</p> <p>Students are responsible for being aware of the University's Internet and email use policy, which can be found at https://ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Acceptable-Use-of-Electronic-Resources-and-Information-Policy.pdf</p>
Deferral of Term work and exams	<p>For more information about deferring a final exam go to https://www.ucalgary.ca/registrar/exams/deferred-exams</p> <p>For more information about deferral of term work go to http://www.ucalgary.ca/pubs/calendar/current/g-7.html https://www.ucalgary.ca/live-uc-ucalgary-site/sites/default/files/teams/14/deferred_termwork-feb-2020_revised.pdf</p>
Intellectual Property & Copyright:	<p>All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright (https://ucalgary.ca/legal-services/sites/default/files/teams/1/Policies-Acceptable-Use-of-Material-Protected-by-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).</p> <p>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</p>
Freedom of Information and Protection of Privacy:	<p>Student information will be collected in accordance with typical (or usual) classroom 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.</p> <p>For more information go to https://www.ucalgary.ca/registrar/student-centre/privacy-policy</p>
Ethics	<p>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.</p> <p>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</p>

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:	
Studio Procedures:	Please view current updates from RISK and the Covidsafe page links to information on rapid testing, masking rules, vaccination regulations and documentation as well as a FAQs page, which must all be followed while in Studios. https://www.ucalgary.ca/risk/emergency-management/covid-19-response https://www.ucalgary.ca/risk/emergency-management/covid-19-response/covidsafe-campus
Emergency Evacuation:	For more information go to https://www.ucalgary.ca/risk/emergency-management/evac-drills-assembly-points/assembly-points
Arts Students' Centre Program Advising:	Have a question but not sure where to start? The Arts Students' Centre is your information resource for everything in the Faculty of Arts. Call us at 403-220-3580 or email us at ascarts@ucalgary.ca . You can also visit the Faculty of Arts website at http://arts.ucalgary.ca/undergraduate which has detailed information on common academic concerns.
Faculty of Graduate Studies:	For graduate studies email: graduate@ucalgary.ca or call 403 220 4938. Visit the Faculty of Graduate Studies for more details: https://grad.ucalgary.ca/