# UNIVERSITY OF CALGARY **DEPARTMENT OF ART**

## **UNDERGRADUATE COURSE OUTLINE**

Art (ART) 317, L01 Electronics for Artists Winter 2018

Lec: Mo We 2:00-3:15 AB 651 Lab: Mo We 3:30-4:45

Instructor: J R Parker
Office Location: AB 611

**Office Phone:** 403 220 6784

**E-Mail:** jparker@ucalgary.ca

Web Page: www.ucalgary.ca/~jparker

Office Hours: Tue 11:00 AM Wed 1:30 PM

# **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 &/or Co-requisites**

3 units (0.5 full-course equivalent) in courses labelled Art. *(formerly Art 439)* 

#### **Objectives of the Course**

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:

- 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.

#### **Textbooks and Readings**

Web site and online notes. http://www.minkhollow.ca/Art317 Electronics for Artists, Simon Field. Chicago review press, 2015. Programming Arduino, Simon Monk, McGraw Hill Education, 2016

# **Assignments and Evaluation**

Studio/Lab assignments (not weighted equally)	40%	Due in labs each week.
Art Project using electronics as a subject	15%	Feb 7
Final project (Installation)		
Design	15%	Mar 7
Final	30%	Apr 4

# Writing

Writing is not a factor in this course.

It is not essential to achieve a passing grade on any particular component of the course in order to pass the course as a whole.

# Registrar-Scheduled Final Exam - NO

Note: It is the student's responsibility to keep a copy of or any relevant documentation regarding each submitted assignment.

Please hand in your assignments directly to your instructor. 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.

# **Late Assignment Policy**

Late assignments will be accepted without penalty.

### **Additional Information**

N.A.

## **Course Activities**

N.A.

# **Grading Method/Grading Scale:**

Percentage	Grade	G.P.V.	Grade Definition
96-100	A+	4.0	Outstanding
90-95	Α	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
70-74	B-	2.7	
65-69	C+	2.3	
60-64	С	2.0	Satisfactory – basic understanding of the subject
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.

#### **Studio Procedures**

The creation of art can be a dirty process and a studio is only workable if everyone cooperates in keeping it clean. Out of respect and consideration for your class-mates and other users of the space, it is expected that everyone will participate in keeping the studio clean and tidy.

#### Internet and Electronic Communication Device Information

N.A.

#### **Academic Accommodations**

The student accommodation policy can be found at: ucalgary.ca/access/accommodations/policy.

Students needing an Accommodation because of a Disability or medical condition should communicate this need to Student Accessibility Services in accordance with the Procedure for Accommodations for Students with Disabilities <u>ucalgary.ca/policies/files/policies/student-accommodation-policy</u>.

Students needing an Accommodation based on a Protected Ground other than Disability, should communicate this need, preferably in writing, to the course instructor.

## **Academic Standing**

For more information go to <a href="http://www.ucalgary.ca/pubs/calendar/current/f.html">http://www.ucalgary.ca/pubs/calendar/current/f.html</a>

#### **Deferral of Exams/Term work**

It is possible to request a deferral of term work or final examination(s) for reasons of illness, accident, family or domestic affliction, or religious obligations. Please check with Enrolment Services if any of these issues make it impossible for you to sit an exam or finish term work by stated deadlines.

For more information about deferring a final exam go to <a href="https://www.ucalgary.ca/registrar/exams/deferred-exams">https://www.ucalgary.ca/registrar/exams/deferred-exams</a>

For more information about the deferral term work go to <a href="http://www.ucalgary.ca/pubs/calendar/current/g-7.html">http://www.ucalgary.ca/pubs/calendar/current/g-7.html</a> <a href="http://www.ucalgary.ca/registrar/files/registrar/deferred\_termwork15.pdf">http://www.ucalgary.ca/registrar/files/registrar/deferred\_termwork15.pdf</a>

#### F.O.I.P.

For more information go to <a href="http://www.ucalgary.ca/secretariat/privacy">http://www.ucalgary.ca/secretariat/privacy</a>

# Writing/Plagiarism

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where appropriate, members of faculty can and should use writing and the grading thereof as a factor in the evaluation of student work. The services provided by the Writing Support Services can be utilized by all undergraduate and graduate students who feel they require further assistance.

For more information go to http://www.ucalgary.ca/ssc/writing-support or

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## http://www.ucalgary.ca/pubs/calendar/current/e-2.html

Using any source whatsoever without clearly documenting it is a serious academic offense. Consequences include failure on the assignment, failure in the course and possibly suspension or expulsion from the university. Visual art projects submitted for course credit must be produced by the student specifically for this class. Students must not submit projects if credit has or will be provided for it in another class. This includes re-worked assignments from previous or concurrent courses, unless permission is provided in writing by the instructor. Additionally, the student is asked to be mindful of using visual sources from the internet, ensuring that that material is not derived from any on-line or other available source, and that appropriate copyright permission is granted, when required.

For more information go to <a href="http://www.ucalgary.ca/pubs/calendar/current/k-2-1.html">http://www.ucalgary.ca/pubs/calendar/current/k-2-1.html</a>

#### **Student Misconduct**

For more information go to <a href="http://www.ucalgary.ca/pubs/calendar/current/k.html">http://www.ucalgary.ca/pubs/calendar/current/k.html</a>

#### **Student Union**

For more information go to http://www.su.ucalgary.ca/

## **Student Ombudsman**

For more information go to <a href="http://www.ucalgary.ca/provost/students/ombuds">http://www.ucalgary.ca/provost/students/ombuds</a>

#### Lockers

The Art Building lockers are administered through the Student's Union's used bookstore, Bound and Copied. Lockers are rented on a first come, first served basis. Due to the shortage of lockers, and the high demand, students cannot hold more than one locker at a time. All of the details on renting a locker and your responsibilities can be found on the Locker Rental Agreement at

https://www.su.ucalgary.ca/wp-content/uploads/2014/08/locker rental agreement 2010.pdf

**Lockers for all sessions** can be rented through <a href="my.ucalgary.ca">my.ucalgary.ca</a>. Once you're in the Student Centre, click on **Other Academic Services** and choose **Locker Reservation**. **Lockers must be vacated by the end of term.** 

For more information go to http://www.su.ucalgary.ca/

#### Models

In this class students may be expected to draw from nude models. A student electing not to do so must notify the instructors IN WRITING of his/her concerns.

## **Portfolios and Assignments**

The Department of Art will not assume responsibility for lost or stolen portfolios or course work given to instructors for grading, or for work posted on bulletin boards in the art building.

Note - All unclaimed work will be disposed of.

Note - Studio spaces, bulletin boards and display areas need to be cleared 2 weeks after the last day of classes.

#### **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 <a href="http://www.ucalgary.ca/pubs/calendar/current/e-5.html">http://www.ucalgary.ca/pubs/calendar/current/e-5.html</a> or

https://www.ucalgary.ca/research/researchers/ethics-compliance/chreb

# **Campus Security/Safewalk**

Call 220-5333 anytime. Help phones are located throughout campus, parking lots and elevators; they connect directly to Campus Security - in case of emergency, press the red button.

For more information go to <a href="http://www.ucalgary.ca/security/safewalk">http://www.ucalgary.ca/security/safewalk</a>

# **Emergency Evacuation**

For more information go to <a href="http://www.ucalgary.ca/emergencyplan/assemblypoints">http://www.ucalgary.ca/emergencyplan/assemblypoints</a>

# Faculty of Arts Program Advising and Student Information Resources

Have a question but not sure where to start? The Arts Students' Centre is your information resource for everything in the Faculty of Arts. Stop by SS102, call us at 220-3580 or email us at <a href="mailto:ascarts@ucalgary.ca">ascarts@ucalgary.ca</a> or <a href="mailto:arts.ucalgary.ca">artsads@ucalgary.ca</a>. You can also visit the Faculty of Arts website at <a href="http://arts.ucalgary.ca/undergraduate">http://arts.ucalgary.ca/undergraduate</a> which has detailed information on common academic concerns.

For program planning and advice, contact the Student Success Centre at 220-5881 or visit them on the 3rd floor of the Taylor Family Digital Library.

For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at 210-ROCK [7625] or visit them at the MacKimmie Library Block.