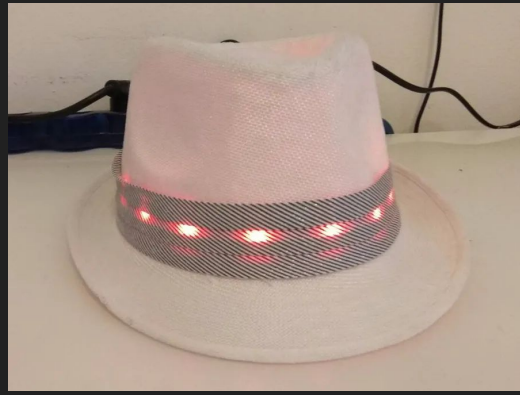


Reimagining Fashion

Upcycling fashion
with Arduino and Fusion 360



Assessments

- ❖ Fashion Industry (CT3) - 2x
- ❖ Fusion 360 & Arduino Coding, Modeling, Programming (M7, M8) - 3x
- ❖ Resource Use & Ethical Considerations Write-Up (CT2, S7) - 2x
- ❖ Product Presentation (E8, S2) - 2x
- ❖ Fashion Narrative (E7) - 2x
- ❖ Fashion Show (S5) - 2x
- ❖ Reflection on Work (CT1, M9) - 2x





Timeline

13 - A The Future (CT3)	14 - B	15 - C Arduino Day 1 (M7)	16 - D	17 Eagle Day
20 - A Arduino Day 2 + Fusion 360 (M8)	21 - B	22 - C Coding & Modeling Challenge Day (E7, E8, S2, M7, M8, M9, CT1)	23 Faculty In-Service	24 Chinese New Year
27 Chinese New Year	28 - D	29 - A <u>Due:</u> write up around the fashion industry (CT2, S7)	30 - B	31 - C <u>1:30 - 3:00</u> Runway Practice (E7, S5)
3 - D	4 - A <u>12:15-1:30</u> 3-min presentation of product (E8, S2)	5 - B	6 - C <u>Lunch Time</u> Fashion Show (S5, M7, M8, M9, CT1, CT2, CT3, S7)	7 Interim Semester Begins

Day 1 (Introduction to the Unit)

Learning Goals:

- ❖ Understand the unit layout
- ❖ Examine the fashion industry and its impact on the environment
 - “Resource Use and Ethical Considerations” write-up is due on January 29th
- ❖ Define upcycle fashion
- ❖ Be inspired by how technology can change the future of fashion
- ❖ Create workflow and collaboration norms

Assessment:

1. Reflect on the biases presented for a CT3 at 2:45pm



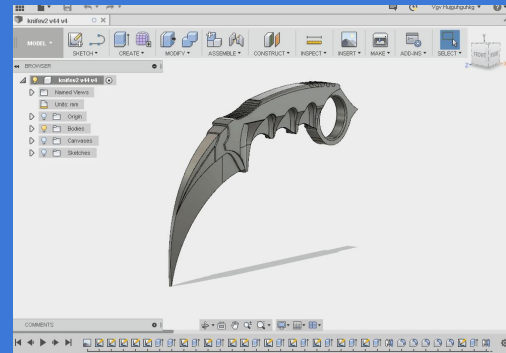
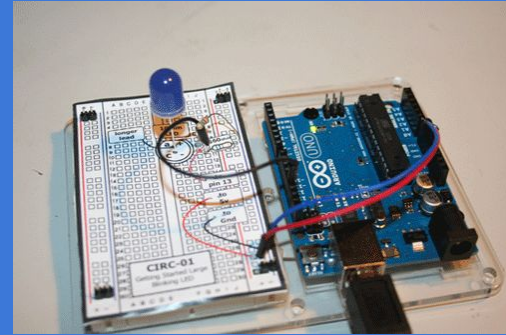
Day 2 & 3 (Introduction to Arduino and Fusion 360)

Learning Goals:

- ❖ Understand Arduino materials
- ❖ Explore breadboard and circuits
- ❖ Utilize Arduino Integrated Development Environment
- ❖ Create a sensing and actuating product
- ❖ Model with Fusion 360

Assessments:

1. Submit Arduino codes for M7 at 3pm on Day 2
2. Submit programming process for M8 at 11:30am on Day 3



Day 4 (Coding & Modeling Challenge)



Learning Goal:

- ❖ Create a working model to showcase “reimagining fashion” using Arduino and recycled materials

Assessments:

1. Submit Arduino code and programming process for M7 and M8 at 1pm
 - a. Due to C2 class, Alisha will submit code and programming process by 11:30am the next day.
2. Present a 3-minute narrative of the “reimagining fashion” working model for E7, E8, and S2 at 1:30pm
3. Complete a Google form reflection for CT1 and M9 at 2:30pm

Light Up (EL) Panel

Design is printed on a thin panel that is attached to the shirt.

High Quality T-Shirt

100% Cotton with built-in fabric sleeve & hidden pocket

Hidden Battery Pack

Light up shirts are powered by a small hidden battery pack that sits in a pocket inside the shirt



Day 5 & 6 (Creating a Product)

Learning Goal:

- ❖ Create a fashion-show-worthy product and build a story around the fashion decisions based on the “Resource Use and Ethical Considerations” write-up

Assessments:

1. Submit “Resource Use and Ethical Considerations” write-up for CT2 and S7 at 8:30am on Day 5
2. Participate in the “Runway Practice” session, which include the story-telling of fashion choice for E7, S5 at 2pm on Day 6

Day 7 & 8 (Towards the Fashion Show)

Learning Goal:

- ❖ Finalize a fashion-show-worthy product

Assessments:

1. Present a 3-minute product rationale for E8 and S2 @ 12:15pm on Day 7
2. Submit a write-up on your fashion choice and how it relates to resource use and ethical considerations for CT2, CT3, and S7 @ 8am on Day 8
3. Showcase the product in a Fashion Show for S5 in the HS Atrium @ 11:35am on Day 8
4. Final product codes and programming process for M7 and M8 @ 3pm on Day 8
5. Google form reflection on unit learning for M9 and CT1 @ 3pm on Day 8



After Interim → Before Spring Break

- AT Science: Product Development
- AT English: Marketing Plan (or your choice - made by February 21)
 - ◆ To submit to Katie: a marketing plan with media of your choice (logo, tag line, ad, commercial, youtube video, infomercial, etc) Your media must hit at least 4 English standards and you will need to explain to Katie how it hits that standard)
- AT Math: Financial Plan
 - ◆ To substitute for Darlene, we will have a finance professional who will come to SAS and help you learn about finance.

To-Do's by January 15th

- ❖ Bring second-hand clothes and/or accessories
- ❖ Bring any recyclable materials
- ❖ Consider a friend or acquaintance who would be willing to be your model who will wear your product (preferably one who has A2/C4 free). Let them know that we will have a Runway Practice on January 31st during 4th block and they will participate in a Fashion Show on February 6th at lunch time.



The Fashion Industry

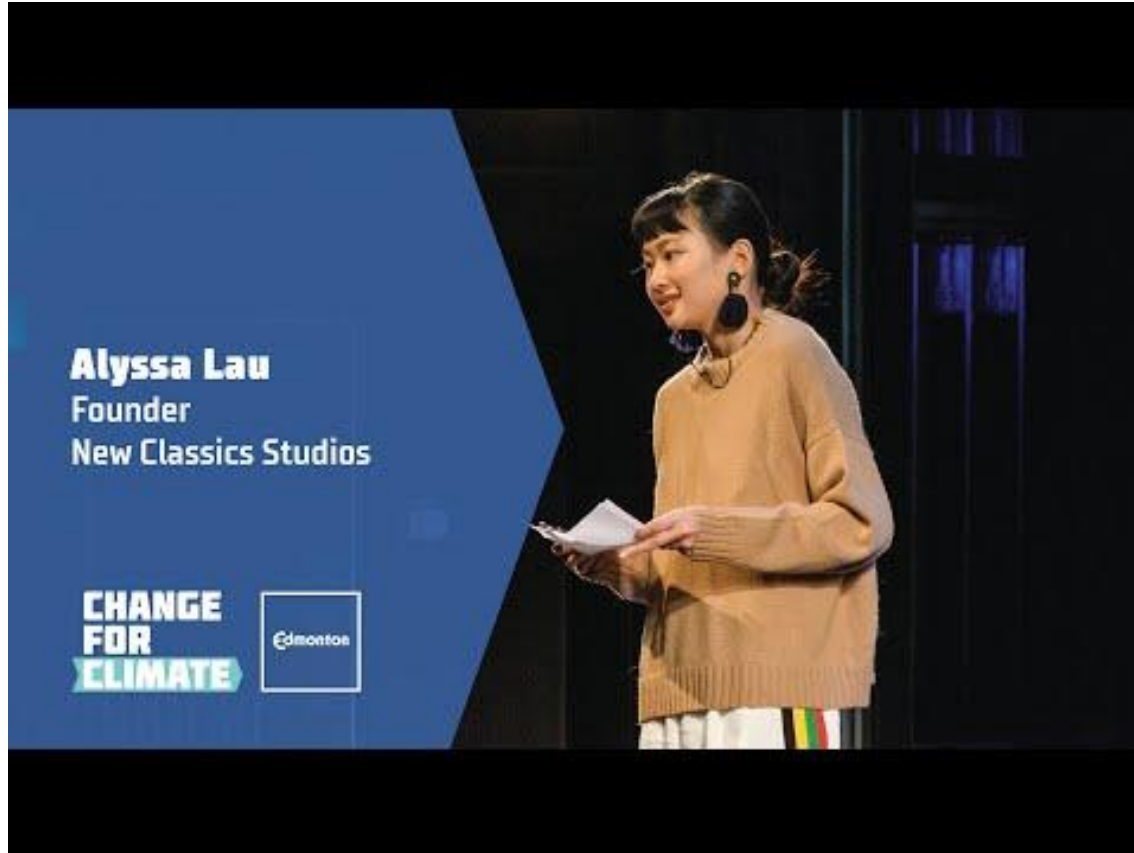
CT3: Evaluating Position

Exemplary	Meeting	Approaching	Below
Thoroughly evaluates own and others' logic, bias, and evidence in the position presented.	Evaluates and identifies several of their own and/or others' logic, biases, and/or evidence in the position presented.	More aware of others' illogical or biased arguments, and struggles to evaluate illogical arguments, biases, or weak evidence used in their own position.	Begins to identify illogical and biased statements or misleading evidence, but cannot properly evaluate the implications.

Fashion Impact on the Environment ([link](#)) - 3:39



Fashion Industry and Climate Change ([link](#)) - 5:54



Various Perspectives to Consider



Consumer

Supplier

Marketer

Producer

Designer

Creator

Worker

Supplier Regulator

Environmental Regulator

Human Rights Regulator

Market Regulator

CT2: Ethical Considerations

Exemplary	Meeting	Approaching	Below
Evaluates ethical issues when presented in a complex, multilayered (gray) contexts AND recognizes cross relationships among the issues.	Explains ethical issues when issues are presented in a complex, multilayered (gray) contexts OR grasps cross relationships among the issues.	Articulates basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.	Recognizes basic and obvious ethical issues but fails to grasp complexity or interrelationships.

S7: Resource Use, Ownership, and Distribution

Exemplary	Meeting	Approaching	Below
<p>Masterfully analyzes resource availability in the development of human society and is consistently able to associate forms of energy production and other resource extraction with economic, social, environmental, and geopolitical costs, benefits and risks, and understands how new technologies and regulations can change the balance of these factors.</p>	<p>Adequately analyzes resource availability in the development of human society and associates forms of energy production and other resource extraction with economic, social, environmental, and geopolitical costs, benefits and risks, and how new technologies and regulations can change the balance of these factors.</p>	<p>Occasionally analyzes resource availability in the development of human society, associates forms of energy production and other resource extraction with economic, social, environmental, and geopolitical costs, benefits and risks, and understands how new technologies and regulations can change the balance of these factors.</p>	<p>Has difficulty analyzing resource availability in the development of human society and struggles to associate forms of energy production and other resource extraction with economic, social, environmental, and geopolitical costs, benefits and risks, and how new technologies and regulations can change the balance of these factors.</p>

The True Cost of Fast Fashion ([link](#)) - 6:50



The life cycle of a t-shirt ([link](#)) - 6:03



Can Fashion Be Sustainable? ([link](#)) - 2:52



Resource Use & Ethical Considerations (due Jan. 29)

- Can the fashion industry ever really be sustainable? ([link](#))
- What is a corporate social responsibility in the fashion industry? ([link](#))
- What kind of impact does the clothing industry have on the environment? ([link](#))
- How does intellectual property rights in the fashion industry affect global sustainability? ([link](#))
- What responsibilities do fashion stakeholders have in ensuring an environmentally-friendly approach to the apparel industry? ([link](#))
- How has clothing manufacturing and consumption pattern affect environmental systems over time in the Anthropocene epoch? ([link](#))
 - Anthropocene: relating to or denoting the current geological age, viewed as the period during which human activity has been the dominant influence on climate and the environment
 - Epoch: a particular period of time in history

Upcycling and Technology

What is Fashion Upcycling? ([link](#)) - 4:09



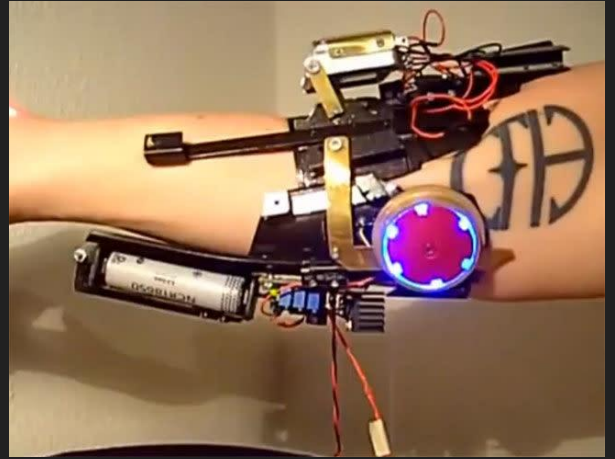
When Fashion Meets Technology ([link](#)) - 6:00

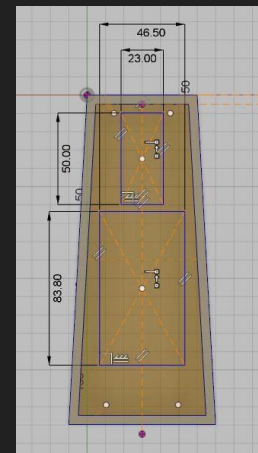
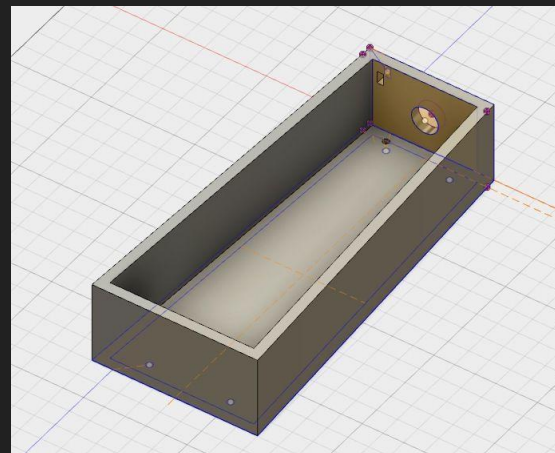
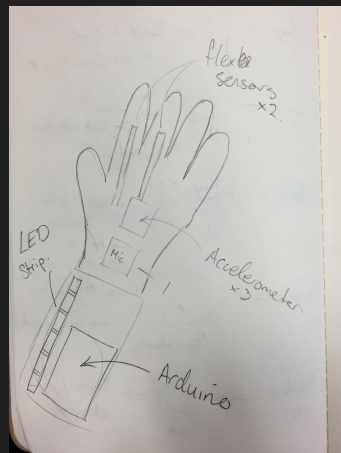
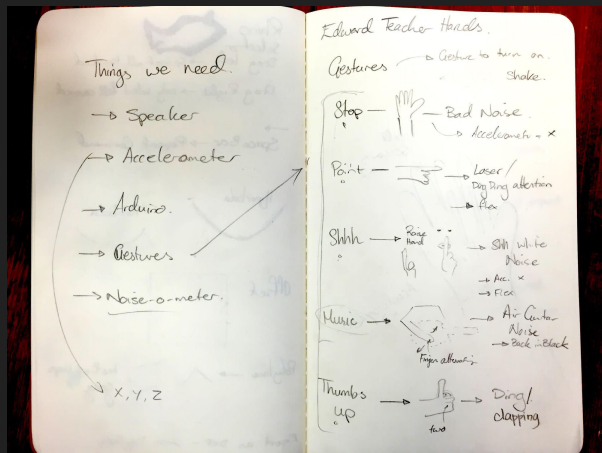
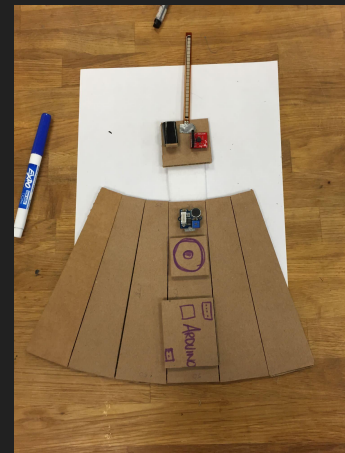
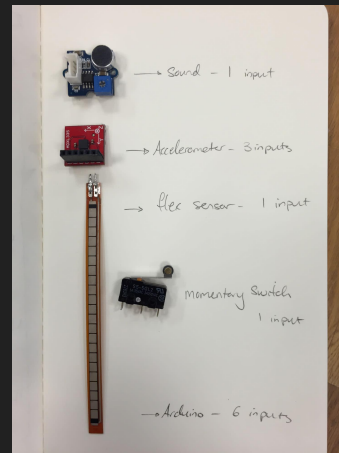
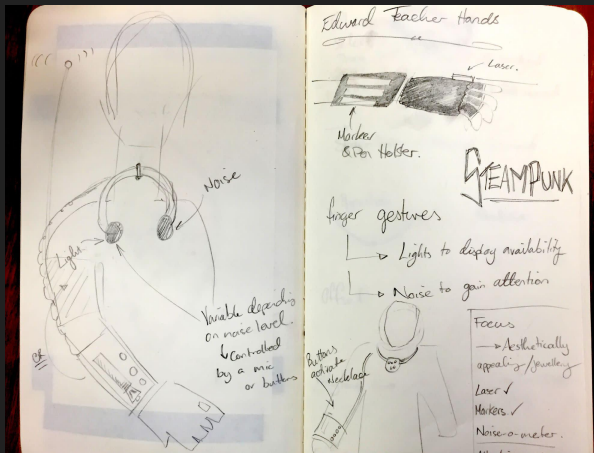
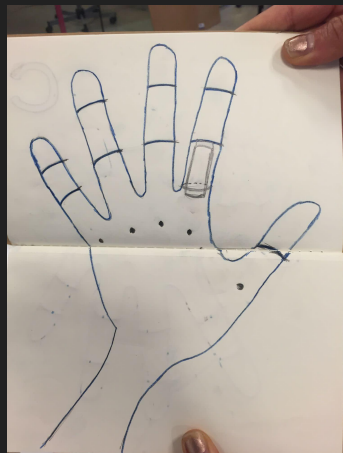


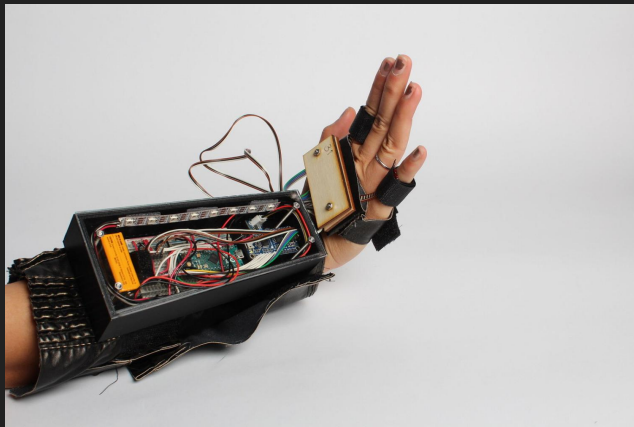
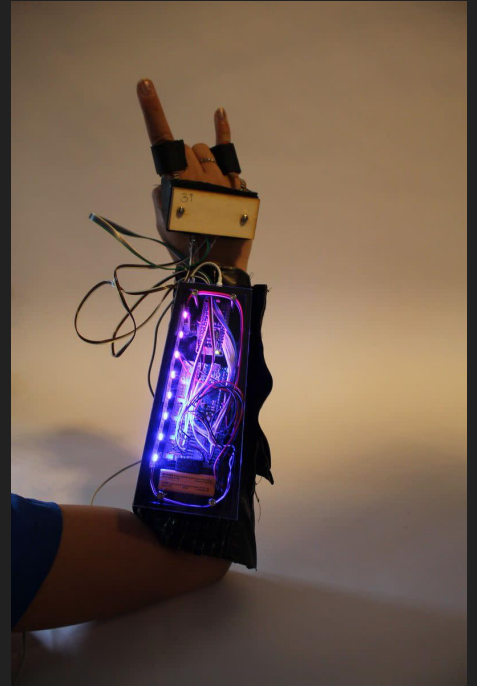
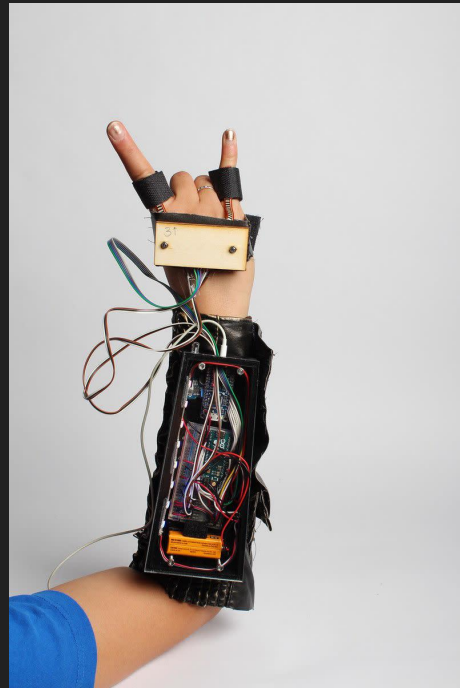
Future Fashion and Wearable Technology ([link](#)) - 3:51



Are you inspired?







Next block:

Activities that will lead to
our workflow and collaboration norms