

FilmMaking Workshop 101: Setting the scene December 12, 2023 with (Marc Bragdon mbragdon@unb.ca)



# Why: extreme close up

#### **SSHRC Knowledge Mobilization Checklist**

#### Why use a knowledge mobilization checklist?

 Canadian research funding agencies expect researchers to plan for knowledge mobilization activities in the development of their research proposal in order to ensure that the research is being used by relevant knowledge users and stakeholders.



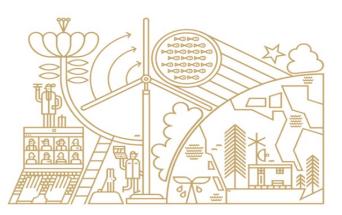
- KMb activities include dissemination and promotion of research findings, and/or co-creation approaches (involving knowledge users throughout the research, implementation, and evaluation processes and in the dissemination or communication of the results).
- Increasingly, the knowledge mobilization plan is part of the evaluation criteria in some SSHRC funding programs and therefore it needs to be well planned.

Well planned knowledge mobilization activities can show reviewers how your project will have influence and impact within and/or beyond the social sciences and humanities research community.



STRATEGIC PLAN

### NSERC 2030: Discovery. Innovation. Inclusion.



The Natural Sciences and Engineering Research Council (NSERC) is Canada's largest funder of science and engineering, with a sterling international reputation thanks to our unwavering support for research excellence. We support the work of the best and most promising researchers, students and postdoctoral fellows at universities, colleges, CÉGEPs and polytechnics across the country.

#### Our vision for 2030

NSERC envisions a diverse and inclusive research ecosystem, one that expands the existing talent pool, welcomes researchers with a range of expertise, finds common space for mutually respectful exploration and decolonizes research practices to support First Nations-, Inuit- and Métis-led knowledge creation and innovation.

We will tirelessly champion discovery research and research excellence in all its forms: interdisciplinarity; partnerships among academia, industry, the public sector, and not-for-profit organizations; research security; and the principles of Open Science; all of this from the local to the global level. We want to help transform Canada into a global sustainability leader with a robust innovation economy and a dynamic research culture. If this sounds ambitious, we are ready.

#### Our focus

Support research excellence that strengthens Canada

Expand, diversify and nurture Canada's talent pool

Translate discovery into impact

Mobilize knowledge on a global scale

Empower our organization and our people

Learn more about our new strategic plan at www.nserc-crsng.gc.ca/nserc2030





MFNI

### **THE CHALLENGE:**

Create a 60 – 90 second video responding to this challenge.

Group entries must have a designated team leader for communications about technical and administrative issues and, where applicable, for finalist and winner notification.

There are no restrictions about how you make your video – you can talk to the camera, use props, incorporate animations, etc. The goal is to get creative.

#### Be sure to include the following elements in your video:

1. Who you are, and the institution/university at which you study/work.

2. Insert your example of interesting research and how it benefits the world now and/or could benefit the world in the future. The example can be from your own research or others' research.

3. Explain why continued federal support for fundamental research is critical to our nation's future. In other words, why should Congress "Fund it Forward?"



**Sustainability** 

**Sustainability Institute** 

**Student Education & Engagement** 

**Campus Initiatives** Research

**Community Engagement** 

### What is the NH Social Venture Innovation **Challenge?**

The annual NH Social Venture Innovation Challenge (SVIC) invites students (as individuals or in teams of up to 4 members) from any University System of New Hampshire school to identify a sustainability problem (as defined by the UN Sustainable Development Goals) at the state, national or global level, and develop creative, sustainable, business-oriented ideas to solve them.

This is an IDEA competition and an excellent applied learning project; no detailed business plans or financials needed. Contestants write a 2-page paper and create a 3-minute video explaining their innovative solution to the problem they identified. **All of the rules**, eligibility and judging criteria, important dates, prizes, and resources to help your entry can be found below.

## **JUDGING CRITERIA**

Participants will be evaluated based on their messaging and communication, creativity, and video and editing quality. Below is a sample rubric judges will use to evaluate each submission.

## JUDGES

Judges will consist of students, university government relations professionals, and university communications professionals.

#### **VIEW RUBRIC**

#### THE Student Video Challenge Rubric COALITION

Please rank video submissions based on the following criteria, evaluating how well participant(s) meet each point. Entries will be ranked from 1 (least effective) to 10 (most effective).

#### **Messaging & Communication**

Α	1	2	3	4	5	6	7	8	9	10	Conveys the excitement and potential of science
в	1	2	3	4	5	6	7	8	9	10	Includes personal interest in research and/or how it could impact people
с	1	2	3	4	5	6	7	8	9	10	Explains why continued federal support for fundamental research is critical to our nation's future
D	1	2	3	4	5	6	7	8	9	10	Communicates in clear language and avoids using overly technical terms
Е	1	2	3	4	5	6	7	8	9	10	Message of the importance of research is clear throughout video

**Total Points:** 

/50

#### Creativity

H 1 2 3 4 5 6 7 8 9 10											
н	1	2	3	4	5	6	7	8	9	10	Narrative coherence
G	1	2	3	4	5	6	7	8	9	10	Originality
F	1	2	3	4	5	6	7	8	9	10	Content is compelling and mainta

**Total Points:** 

/30

#### Video and Editing Quality



Filming quality including: clear audio, steady video, framing, focus, good lighting, etc. Editing quality including: smooth transitions, synchronization of audio and video, etc.

ains audience's attention

**Total Points:** 

/20

## How do they stack up: student video winners

Campus Energy Contest:

https://youtu.be/nl-PKWGoARk?si=r0koRbqejC2nBpFm

US EPA EJ Video Contest: <u>https://youtu.be/IE-ax71Clal?si=Xnh5PHtDTpnEAHMI</u>

Social Venture Innovation Challenge: https://youtu.be/su0q8sQp0F8?si=VnNxKm6WaenCNI2O

SSHRC Storytellers Challenge:

https://youtu.be/jwdYFGAiqow?si=vUT6BrGeb4WebpUs

## Today's goals



Understand the basics of video making technologies and techniques Shoot drafts of scenes for a video in order to internalize this understanding

2

Edit the draft shots on a video timeline and incorporate sound design

3



Leave with the tools for planning a video showcasing your research or program focus



# Working draft

#### Storyboard a short video

Compose and Shoot:

- Narration (talking head) as base or underlying video clip(s) using either the teleprompter or lightboard studio
- Illustrative cutaway clips that will overlay the narration Using Davinci Resolve or iMovie:
- Add and edit video clips to a project
- Add and edit music and/or sound effects within the project
- Render the project as a video file

### https://lib.unb.ca/guides/filmmaking-101-workshop

#### Planning and writing for a medium and a dynamic: *enthralling and breezy*

	READING	VIEWING	LISTENING
Working example	Article	YouTube video	Podcast
Medium	Light	Light and sound	Sound
Meaning	Word choice, graphs, tables, etc.	Focus, word choice, tone of voice, facial expressions, image representation (content, composition, framing, pacing) performance, sound design,	Word choice, tone of voice, effect of music and sounds
Direct Receptors	Eyes	Eyes and ears	Ears
Invoked Receptors	All	All	All
Navigation	Flexible	Mostly Linear	Linear
Personal Mobility	Limited	Limited	Full

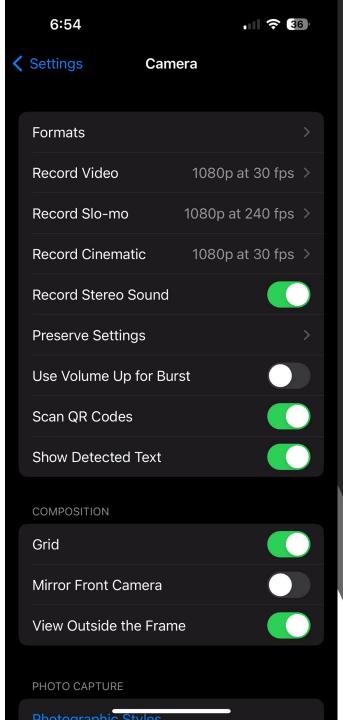


# Technology and technique

- Moving image photography (camera + lighting)
- Sound recording
- Language of film
  - Narrative approach
  - Compositional techniques (choosing shots to craft a narrative)
  - Editing (relating shots to each other, adding effects including overlays and sound, and pacing the narrative)
- Self-presentation

## Moving image photography (camera + lighting)

- Camera settings
- Picture stabilization
- Lighting
- Sound



# Camera settings

Aspect ratio, resolution, and fps (frames per second) should match destination platform recommendations:

• Aspect ratio:

- YouTube: 16 x 9 aspect ratio (landscape)
- Instagram/TikTok: 9 X 16 (portrait)

### • Resolution:

- YouTube: 4K or 1080p HD
- Instagram: 1080p HD
- Activate the Grid (for composing shots)
- iPhone + Davinci? "Most compatible" file format
- The higher the **fps** the "crisper" the video at maximum display. (30 fps is standard in social media)
- The higher the fps (60 or higher), the better for slow motion
- The lower the fps (the more motion blur), the more cinematic (soft) the affect (24 fps usually) and the better in low light

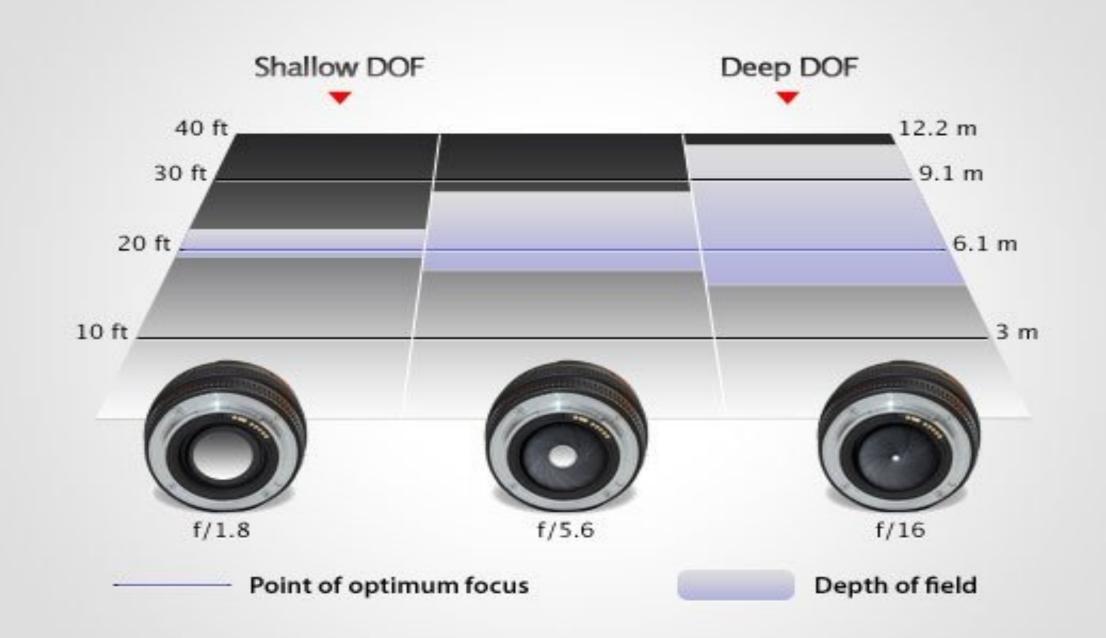
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3 pillars of photography and their relationship to moving images Shutter speed: how long the lens opens – the lower the shutter speed, the softer the transition between moving images

Aperture (F-stop): how wide the lens opens – the larger the lens, the shallower the depth of field (ability to focus on a subject)

ISO – light "amplifier" behind the lens – the harder it has to work, the grainier the photo.

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## Exposure and Focus

E-LA

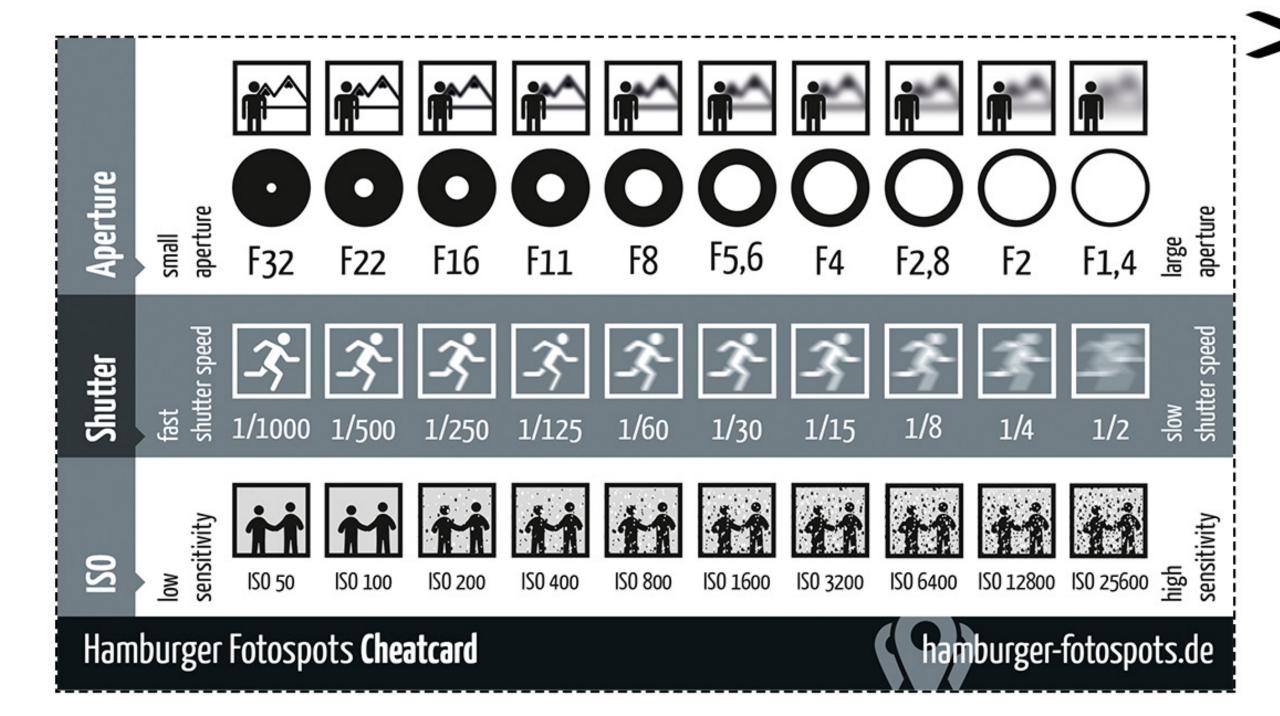
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# Focal point and Depth of field

0:00:00

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IME-LAPSE



# Approximating the "Film Look"



- Depth of field: framing or focusing within a frame, resulting in blurring background or "bokeh"
- 24 fps + 1/48 (shutter speed) = motion blur (works better at low levels of light) – limits to how low you can push ISO (or how much light you can keep out).
- Colour: noticeably less contrast (allowing for more control during editing / colour correction)
- Camera movement: implies action
- Try adding in slow-motion (shooting normally but at a high shutter speed - 60fps) for B-roll (more on this later)



## Know your lenses

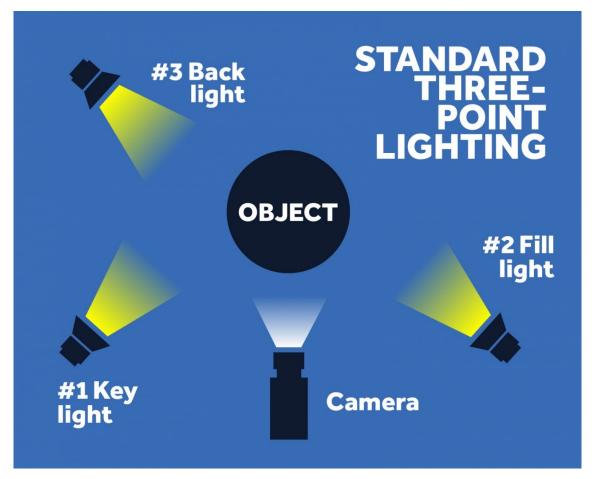
#### Based on iPhone 14 Pro

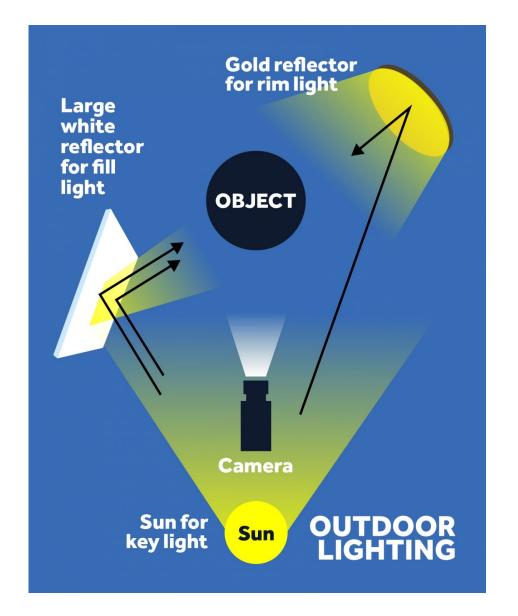
- Ultrawide (0.5X): for landscapes, for stabilization, not for closeups
- Main camera (1X): largest aperture and sensor, best for indoors and low light outdoors
- Telephoto (3X): better for closeups, not great in motion
- 2X is a digital zoom (crop) of 1X,
- For optimal quality, avoid zooming



## Picture stabilization and camera motion

Lighting is everything





# Cellphone lighting tips

- Use natural light whenever possible (your flash sucks)
  - Early and late day light are often softest and most attractive
- Position subjects sideways or at an angle to the light sources
- Backlighting a subject can produce a "dramatic" effect
- Bad lighting situation?
  - AE/AF locking onto the subject to control focus and exposure
  - Focus in close on the subject
  - Consider an app like FiLMiC Pro, InShot, etc. for more control of exposure, focus, white balance, etc.



# Sound recording

- Cellphone audio recording technology lags considerably behind photo/video technology in terms of quality.
- For live sound, use a separate, specialized audio recording device – called a microphone:
  - Directional or shotgun: isolates specific sound (e.g., the human voice), either attached to camera or to separate capture device
  - Ambient: optional/advanced, for room sound, attached to separate device
- High pass / low cut filter setting (where available) attenuates low frequency noises, such as HVAC
- Use a clapperboard (or just clap!) to assist in later synchronizing audio with video during editing.











# Exercise 1: First pass at the script/pitch

15 minutes

In groups of 2:

Shoot two 30 -60 second video clips: (1) introducing yourself and (2) your activity partner (who each of you are, your degree focus, and the rest of your script, mindful of:

- Shooting in 16:9 / 1080p or 4K / 30 fps or 24 fps (check your camera or camera app settings)
- Hold camera in portrait orientation (might have to turn off orientation lock)
- Lock / adjust focus and exposure on each of your subjects (i.e., your activity partner)
- How will you stabilize your shot? Or will you?
- Try positioning subject:
  - where the main light source is hitting them at a flattering angle (vs straight on)
  - with the background at a considerable distance in order to produce as shallow a depth of field as possible
  - plan it out first a combination of positioning, lighting and adjusting exposure.

#### Switch roles

Reviewing your video and reflecting on the activity, was there any way you might have framed or moved a shot to lend it more impact?



# Film Techniques: The Language of Film



# Language of film: compositional techniques

## Form follows function

- Shots / Frames: Video clips with (hopefully) deliberately chosen perspectives and movements to craft a narrative.
- Composition / Blocking: Determining the position and movements of subject and objects in relation to one another.
- Representations / B roll: Shots that are (hopefully) related to the main action of a given scene and can be woven in during editing to serve the narrative (or cover mistakes).



# VS



# Crafting a narrative with shot choices

Facets of a story	Shot options
Where (environment)	Establishing (or wide) shot
Who (the subject)	Close up
What (drama/actions performed by or on subject)	Long or wide shot
When (time period, at a point in a given story)	<ul> <li>-Continuous shot or long take (representing space + time),</li> <li>-Close up of symbolic objects (sun, moon, clock) or actions (walking feet, reaching for a door knob)</li> <li>-see Pacing (cuts)</li> </ul>
Why (internal decisions making of the subject, or emotional effect upon)	Extreme close up, sequence of other shots explaining back story

https://youtu.be/W8YgoZs92Ko



Close up

## Extreme close up

## Medium close up

## Wide / long

## Shot motions / perspectives

Action	Description and Use
Static	The camera remains completely still, capturing a fixed frame. <b>Use</b> : Used for stability, to establish a scene, or create a sense of normalcy.
Pan	The camera rotates horizontally from a fixed position. <b>Use</b> : Used to reveal or follow action horizontally, or to connect different elements in a scene.
Whip Pan	A rapid and abrupt pan movement, creating a blur effect. <b>Use</b> : Used for transitions between shots, to convey disorientation or sudden change.
Gimble	The camera is attached to a stabilizing device, allowing for smooth handheld-like movement. <b>Use</b> : Used for fluid and dynamic shots (e.g., following a subject) while maintaining stability.
Handheld	The camera is held by the operator without stabilization, resulting in a shaky, documentary-style look. <b>Use</b> : Used to create a sense of immediacy, chaos, or realism.
Zoom in / out	Combines a zoom with a physical camera movement, often called a "zolly" or "dolly zoom." <b>Use</b> : Creates a surreal or disorienting effect, often used to convey a character's emotional state.
Pull Focus	The focus shifts smoothly from one subject to another within a shot. <b>Use</b> : Draws attention to different elements in the frame, guiding the viewer's focus.

## Pacing and the relationship of shot to shot

Single take (continuous shot)	All the action takes place in <b>one long take</b> , may involve significant camera movement, implying continuous action			
Hard (standard) cuts and <b>cutaway shots</b>	Cutting from clip A to clip B within the same scene or between scenes – can be used to convey a narrative or cover mistakes. Spoken parts may sometime overlap across cuts (from "talking head" to "action shot + voice over)			
Jump cuts	<b>Jumping to a later point</b> in the same scene, usually from the same or slightly different composition, giving the effect of jumping forward in time			
Cross dissolves	Gradual (fast or slow) <b>fade</b> from one shot to another, denoting a significant change in time/space			

# More on Shots: angles / perspectives

POV (Point of View)	Shot from the subject's visual perspective Purpose: Puts viewer in the action
Over the shoulder	camera is positioned just behind a character's shoulder and is focused on another character or object. Purpose: Helps in showing a conversation or reaction.
Overhead (bird's eye view)	camera is directly above the subject, Purpose: creating a general overview or "god's eye view" of the scene.
Low	"Ant's eye view"? Used to emphasize motion and flow, create depth to a narrative segment
Time lapse	Sped up cutaway/b-roll representing an action within the narrative or the passing of time (sometimes as a transition)

# More on Shots: movement and perspective





# RECORD GREAT VIDEO LECTURES

00:00

## Playing the part

DELIVERY

I have a clean professional appearance (hair is not a mess / food in teeth) I'm wearing proper attire (avoid wrinkles / checkered patterns) I have good posture I'm looking at the camera lens when I'm talking I'm relaxed and talking in a friendly manner I don't forget to smile at least once per lesson I have edited all mistakes I've deleted or avoided filler words such as "um"/ "uh" / "er" I've rehearsed at least once what I'm going to say I get to the point and avoid ranting I have a glass of water near me when recording I'm keeping a positive attitude I have a clear idea of Why I'm teaching this course



### Exercise 2: There you go (cutaways)!

- You will have 30 minutes
- Create a multi-shot, 16 X 9 (landscape, 1080p, 30fps) 60 second YouTube video showcasing a library space
- In groups of two, where one is the shooter and the other the actor, choose a trajectory between locations, a subject (you), and action (e.g., RC room, your activity partner, some activity usually related to the space)
  - Examples of action could be: retrieving/reading a book, entering or exiting a space, engaging with a technology etc.
- Shoot short video clips, choosing shot, composition, and movement options that function to:
  - Establish the scene (opening shot)
  - Introduce the subject in motion
  - Film a cutaway shot of objects or scenery via motion
  - Highlight the action (subject's relationship to object, place, function, etc.)
  - Document the action's effect on the subject

## Planning Considerations

- What story would you like to tell (message + vision)?
- How will you structure and represent your story – what are the parts, and in what order will they appear?
- Which images will you use?
  - Still? Moving? Fictional representations? Documentary images?
  - How will you shoot and compose them?
  - Which words/sounds will fit with the images you choose?
- Will you use narration, subtitles, music?
- Who will assume which role(s)?

FilmMaking Workshop : Storyboard A multi-shot, (guideline: 4 X 15, or 6 X 10, or some such = 60 second) video. 16 X 9 landscape, 1080p, 30fps YouTube video showcasing a library space, service, technology, and your impression of it. - update In groups of two, where one is the shooter and the other the actor, choose a location, subject, and action (e.g., RC room, your activity partner, some activity usually related to the space) Examples of action could be: retrieving/reading a book, entering or exiting a space, etc. Shoot four video clips, choosing shot and movement options that function to: Establish the scene (opening shot) Introduce the subject (person) Highlight the action (subject's relationship to object, place, function, etc.) Document the action's effect on the subject Consider representations / shot choices / compositions / camera movements - nather into Andio Statio, information to Andio Statio, Structure in thomas for Scensio recein Setting the scene: - ibrusy / RC Representation(s): Building , Floor Establishing shot(s) Notes (camera movements, perspectives, transitions) rising shot from growd up, pre-focus on library risis stat over the Showder Shot as 60 FPS rep stairs Tractings side shot up strings and twining left (lose up of feet, static wide shot

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## Do you want to redo your base narrative (Exercise 1)?

## FilmMaker Studio with teleprompter

## Lightboard Studio

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# More on delivery:

#### Before the shoot:

Practice appropriate expressions in the mirror or in test shots; review, repeat

Get into your body – stretch, jump up and down Wipe your face (often) to mitigate shine

### During the shoot:

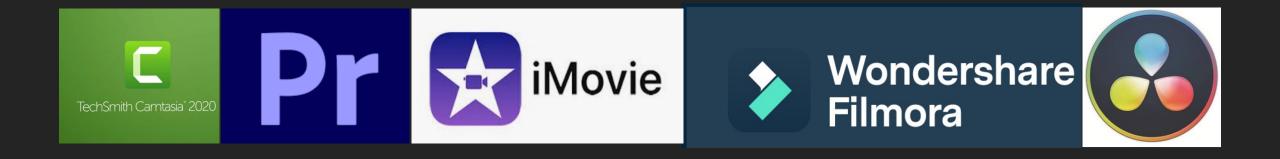
1.5-2 X the energy you think you need to channel



### Break



Elements of film making



## Film editing

- Desk/laptop video editing software: Adobe Premiere Pro, Final Cut Pro, Davinci Resolve, iMovie, Powtoon (cartoons), Camtasia (screencasts)
- Phone apps: iMovie (for iPhone), Power Director (for Android), Adobe Premiere Clip, WeVideo

## Sound design

#### freesound

Downloadable sound effects under Creative Commons license <u>https://www.freesound.org</u>

• Uppbeat

Three free downloads a month

https://uppbeat.io

#### • Premium Beat

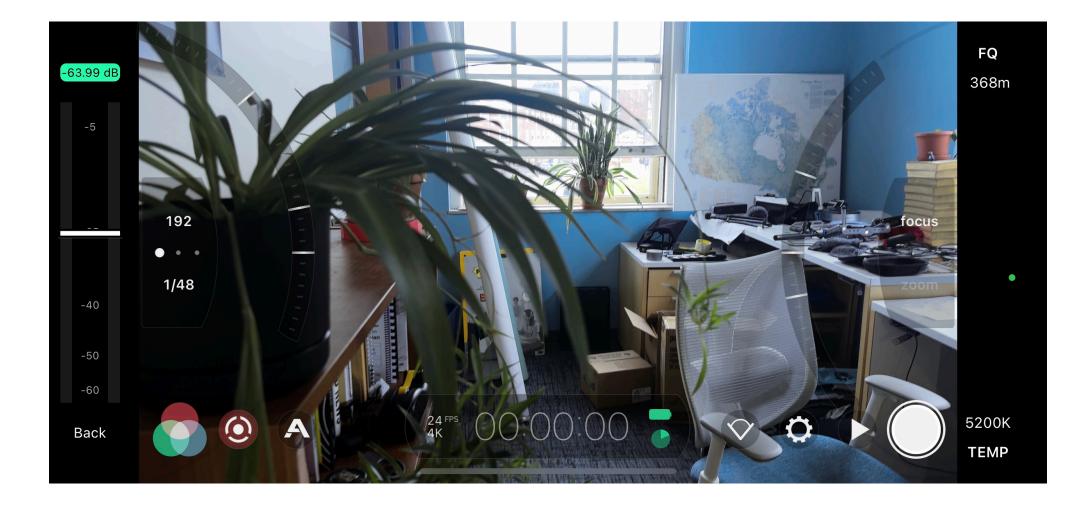
Large archive of artists-supplied music that can be licensed individually (vs subscription) https://www.premiumbeat.com/

## https://lib.unb.ca/guides/filmmaking-101

Edit in iMovie (Mac) or Davinci Resolve (Mac or PC)

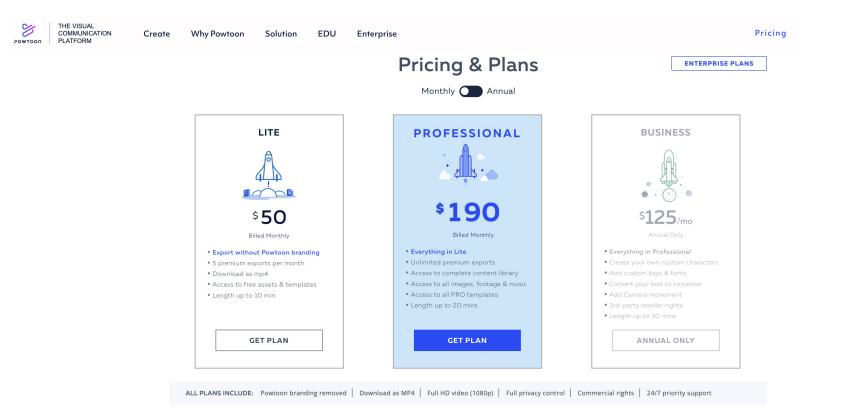
- Add base or underlying clips (narration)
- · Add cutaway clips for your timeline (above narration)
- · Order and trim clips
- Adjust clip volumes / add effects
- · Adjust colour if desired
- · Add music or sound effects if desired
- · Render to Video File

### Considering Camera Apps for more options? (FilmicPro below)



### Considering online Apps (VEED.IO below) for integrated tools?

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### Considering animation for more flexibility?

### Considering using stock (not your) footage?

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## Thank you! Look for the advanced workshop in Winter 2024

### Or

Contact Marc – mbragdon@unb.ca

To discuss individual or group film projects <u>https://lib.unb.ca/researchcommons</u>