The Technology Learning Center (TLC) supports the creation and use of multimedia in teaching and learning with an emphasis on course-related digital media projects. Open to all current faculty, staff, and students of the University of Richmond, we provide software, equipment, and support for the production of sound, video, graphics, websites, and 3D objects. Audio/video equipment is available for short-term checkout with priority going to class projects. TLC staff members work with the university community to make sure they complete their projects.

In addition, we wish to reach out to more artists in the community to increase artistic interest at the University of Richmond. For film makers and photographers, we have advanced cameras and camera equipment for checkout. For illustrators, we have a large 27" HD Wacom Cintiq drawing tablet. For musicians, we have rentable audio rooms with sound mixers and high-quality microphones. For digital artists, we offer the entirety of the Adobe Creative Cloud and an Epson art printer capable of printing advanced color profiles. At the TLC, your creation is only limited by your imagination.

Although we are identified as a technology center, you do not need to be tech savvy to use our resources. We invite all who show interest and desire to learn about our resources regardless of technological knowledge.
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Rental Policy

Rentable equipment is available to all current faculty, staff, and students for a three-day checkout. Renewal is available on a case-by-case basis depending on the demand of equipment. Failure to return the item will result in a fine, imposed at a rate of $25.00 per day, per item.*

Priority checkout will be given to those with class projects.

*Due to COVID-19, this policy has changed for the time being. Please contact us for changes before checking out equipment.
Simple Cameras

**Lumix DC Vario**
**Still camera**

Basic point-and-shoot camera. Optimal for entry level photography.

**Canon Vixia**
**Camcorder**

Easy to understand camcorder for quality film recording. Great for simple class projects that do not require advanced understanding of camera equipment.

*microphone for separate check-out
Professional Cameras

Canon Rebel T5/T6/T6i
DSLR

Have more control over your images. Multiple lenses and variable settings allow you to set your shot just right without intensive post production. Comes with a 75-300mm and 18-55mm lens. Suitable for both photography and film.

**Specs**

<table>
<thead>
<tr>
<th></th>
<th>T5/T6</th>
<th>T6i</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pixels</td>
<td>Actual: 18.7 Megapixel</td>
<td>Actual: 24.7 Megapixel</td>
</tr>
<tr>
<td></td>
<td>Effective: 18.0 Megapixel</td>
<td>Effective: 24.2 Megapixel</td>
</tr>
<tr>
<td>Max Resolution</td>
<td>5184x3456</td>
<td>6000x4000</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>3:2</td>
<td>3:2</td>
</tr>
<tr>
<td>IOS Control</td>
<td>100-6400 (Extended mode: 100-12800)</td>
<td>100-12800 (Extended mode: 100-25600)</td>
</tr>
<tr>
<td>Built-in Flash</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Frame Rate (Video)</td>
<td>24 (T5), 25, 30, 50, 60</td>
<td>24, 25, 30, 50, 60</td>
</tr>
<tr>
<td>Max Video Length</td>
<td>29 minutes, 59 seconds (Full HD)</td>
<td>29 minutes, 59 seconds (Full HD)</td>
</tr>
<tr>
<td>Weight</td>
<td>15.3 oz / 433.8 g (body) (T5)</td>
<td>19.58 oz / 555.09 g (body)</td>
</tr>
<tr>
<td></td>
<td>17.1 oz / 484.8 g (body) (T6)</td>
<td></td>
</tr>
</tbody>
</table>
What comes in the bag

- 32GB SD card
- rechargeable battery (x2)
- 75-300mm lens
- 18-55mm lens
- USB cable
- Battery charger
The Canon Rebel T7i is much more powerful than the Rebel T5i or T6. With a longer battery life and more accurate auto-focus capabilities, it captures clearer images faster.
**Specs**

- **Pixels**
  - Actual: 25.8 Megapixel
  - Effective: 24.2 Megapixel
- **Max Resolution**
  - 6000x4000
- **Aspect Ratio**
  - 1:1, 3:2, 4:3, 16:9
- **IOS Control**
  - 100-25600 (Extended mode: 100-51200)
- **Built-in Flash**
  - Yes
- **Frame Rate (Video)**
  - 30, 60
- **Max Video Length**
  - 29 minutes, 59 seconds
- **Weight**
  - 1.17 lb / 532 g (body)

**What comes in the bag**

- 32GB SD card
- rechargeable battery (x2)
- 70-300mm lens
- 18-55mm lens
- USB cable
- Battery charger

*This equipment is only available for checkout for more advanced camera users. Contact a TLC Employee for more info.*
Canon EOS 6D
DSLR

Similar to the EOS Rebel series but with more precise lenses, shutter options, and picture quality. Comes with a 75-300mm and 24-105mm lens. Some learning curve if you're not familiar with the camera's additional features.

*Stereo microphone available for separate checkout.

What comes in the bag

- 32GB SD card
- rechargeable battery (x2)
- 75-300mm lens
- 24-105mm lens
- USB cable
- Battery charger

 Specs

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pixels</td>
<td>Actual: 20.6 Megapixel</td>
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<tr>
<td></td>
<td>Effective: 20.2 Megapixel</td>
</tr>
<tr>
<td>Max Resolution</td>
<td>5472x3648</td>
</tr>
<tr>
<td>Aspect Ratio</td>
<td>3:2</td>
</tr>
<tr>
<td>IOS Control</td>
<td>100-25600</td>
</tr>
<tr>
<td></td>
<td>(Extended mode: 100-102400)</td>
</tr>
<tr>
<td>Built-in Flash</td>
<td>No</td>
</tr>
<tr>
<td>Frame Rate (Video)</td>
<td>24, 25, 30, 50, 60</td>
</tr>
<tr>
<td>Max Video Length</td>
<td>29 minutes, 59 seconds</td>
</tr>
<tr>
<td>Weight</td>
<td>27.16 oz / 769.99 g (body)</td>
</tr>
</tbody>
</table>

*This equipment is only available for checkout for more advanced camera users. Contact a TLC Employee for more info.
Canon XA 20/30 Video Camera

High quality filming with attached external microphone. Superior video and audio with an intermediate learning curve. Slightly larger and heavier; a tripod is recommended.

What comes in the bag

- 64GB SD card
- rechargeable battery (x2)
- shotgun microphone
- headset
- USB cable
- wireless controller
- battery charger

Specs

<table>
<thead>
<tr>
<th>Feature</th>
<th>XA20</th>
<th>XA30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>1920 x 1080</td>
<td>1920 x 1080</td>
</tr>
<tr>
<td>Pixels</td>
<td>Total Pixels: 3.09 Megapixels</td>
<td>Total Pixels: 3.09 Megapixels</td>
</tr>
<tr>
<td></td>
<td>Effective Pixels: 2.91 Megapixels</td>
<td>Effective Pixels: 2.91 Megapixels</td>
</tr>
<tr>
<td>Zoom Range</td>
<td>20x Optical / 400x Digital</td>
<td>20x Optical / 400x Digital</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>24 - 60</td>
<td>24 - 60</td>
</tr>
<tr>
<td>Weight</td>
<td>1.7 lb / 765 g</td>
<td>1.7 lb / 765 g</td>
</tr>
</tbody>
</table>
Canon XA 40
Video Camera

What comes in the bag

- 64GB SD card
- rechargeable battery (x2)
- shotgun microphone
- headset
- USB cable
- wireless controller
- battery charger

Specs

<table>
<thead>
<tr>
<th>Spec</th>
<th>XA40</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>1920 x 1080, 3840 x 2160</td>
</tr>
<tr>
<td>Pixels Total Pixels</td>
<td>Total Pixels: 21.14 Megapixels</td>
</tr>
<tr>
<td></td>
<td>Effective Pixels: 8. Megapixels</td>
</tr>
<tr>
<td>Zoom Range</td>
<td>20x Optical / 400x Digital</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>24 - 60</td>
</tr>
<tr>
<td>Weight</td>
<td>1.6 lb / 726 g</td>
</tr>
</tbody>
</table>
Sony DSC-RX100
Digital Camera

Compact camera usually used for filming, but can also take high-quality photos. Excels in low-light situations. Perfect for documentary or vlogging projects.

**Specs**
- **Weight**: 240g
- **Aspect Ratios**: 1:1, 3:2, 4:3, 16:9
- **Resolution**: 5472 x 3648
- **Image File Format**: JPEG, RAW
- **Zoom Range**: 3.6x Optical / 3.8x Digital

**Video**
- **Resolution**: 1920 x 1080 (60fps)
- **Recording Limit**: Up to 29 minutes
- **Frame Rate**: 30-60
Camera Accessories

Manfrotto/Magnus Tripod

We carry two different tripod brands: Manfrotto and Magnus. They can go from a minimum height of about 26” to a maximum height of about 60”. Each tripod comes with a tripod bag for easy transportation.

Magnus Flexible Tripod

Sturdy tripod that provides more flexibility than traditional tripods. The tripod’s bendable legs allow for more angles and shots in different environments. Maximum height of around 10’
Manfrotto
Monopod

The monopod is often used to reach places that a tripod usually cannot. Its slim design makes it easy to set up in any environment. It also allows for dynamic shots with its angular rod.

**Specs**

<table>
<thead>
<tr>
<th>Height</th>
<th>Max height: 203cm (79.9in)</th>
</tr>
</thead>
</table>

CAME-TV
Camera Stabilizer

Known as the P06 Carbon Fiber Stabilizer, the accessory is designed to be used with DSLRs and small camcorders weighing up to 6lb. It is used to produce seamless moving recordings by reducing shakiness.

Click on the blue dot to see some test shot footage of a camera using a stabilizer!

**Specs**

| Height | Min height: 350cm (13.78in)  Max height: 475cm (18.7in) |
Raya
Reflector Disc

This 32” 5-in-1 collapsible reflector disc will easily help you control the lighting environment around you. Use it to increase lighting, diffuse it or even change the temperature of the lighting. The reflector disc comes with white, silver, gold, and black coverings with a transparent disc.

Impact
Tripod Sandbag

The Impact sandbag is made with weather and water-resistant Cordura nylon. It is used to stabilize tripods, light stands, boom poles, and backdrop equipment whenever needed for rocky surfaces.

Digital Juice
Color Gels

This pack includes 15 heat resistant 20 x 24” gel sheets used to correct lighting or to create lighting effects.
IKAN Light Kit

Powerful battery-powered LED lights with temperature and luminosity controls for cordless set-up.

What comes in the bag

- LED lights (x2)
- rechargeable battery (x4)
- light stands (x2)
- extension cord
- battery charger

Angler Ring Light

This bi-color ring light comes with a stand for various height adjustments. Perfect for portraits or interviews.

*Only for use in-lab. Checkout not available.*
Lenses

Different lenses for different situations. These lenses are best suited for portrait photos but can be used for a wide range of purposes.

▶ Bokeh Effect
The effect produced in many portrait photos where the subject is clear and the background is blurred.

50mm f/1.8
Creates professional looking portrait photos with the bokeh effect

50mm f/1.4
Also produces the bokeh effect, but works better in low light in producing clear images

85mm f/1.8
Produces a stronger blur and more control over low light environments

17-55mm f/2.8
Versatile wide-angle lens with flexible zooming. Improves clarity and sharpness throughout the zoom range.

*Not compatible with EOS 6D

10-18mm f/4.6-5.6
Wide-angle lens perfect for small spaces or landscape photographs. Because if its small size, it sacrifices a bit of zoom potential.

*Not compatible with EOS 6D
GoPro Series

GoPro Hero 3/Hero 5 Video Camera

Durable cameras used to capture dynamic movement. The GoPro Hero 5 is completely housed in a waterproof case, allowing for underwater shots.

Specs

<table>
<thead>
<tr>
<th>Memory card slot</th>
<th>Hero 3</th>
<th>microSD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frame rate</td>
<td>Hero 3</td>
<td>24 - 120 (dependent on settings)</td>
</tr>
<tr>
<td>Video Resolution</td>
<td>Hero 3</td>
<td>1920x1080, 1440x1080, 1280x720</td>
</tr>
<tr>
<td></td>
<td>Hero 5</td>
<td>microSD</td>
</tr>
<tr>
<td></td>
<td>Hero 5</td>
<td>24 - 240 (dependent on settings)</td>
</tr>
<tr>
<td></td>
<td>Hero 5</td>
<td>1920x1080, 1440x1080</td>
</tr>
</tbody>
</table>

What comes in the bag

Hero 3
- 32GB microSD card
- battery
- microSD adapter
- clamp
- USB cable
- wireless controller
- controller charger

Hero 5
- 32GB microSD card
- battery
- microSD adapter
- tripod baseplate
- chest mount
- headstrap and quickclip
- adhesive mounts
- floatie
- Quik key card reader
- USB cable
- wireless controller
- controller charger
GoPro Hero 7
Video Camera

What comes in the bag

- Hero 7
- 32GB microSD card
- battery (x2)
- microSD adapter
- clamp
- USB cable
- wireless controller
- controller charger
- Quik key card reader
- tripod mounts
- chestmount
- Adventure Kit

Direct streaming to Facebook Live

Hypersmooth video stabilization

4k60 video

Specs

- Memory card slot: microSD
- Frame rate: 24 - 240 (dependent on settings)
- Video Resolution: 3840x2160, 2704x1520, 1920x1440, 1920x1080, 1440x1080, 1280x720

GoPro Hero 7
Kyle Wicks
GoPro Fusion
360 Video Camera
Perfect for VR content

Specs
Memory card slot
Frame rate
Video Resolution
requires 2 microSD cards
25, 30, 50, 60
3000x1504, 5228x2624

Test footage (Fusion)
Waterproof up to 16 feet
5.2K video up to 30 fps
360° audio capture
Voice control

What comes in the bag
- 64 microSD card (x2)
- battery (x2)
- USB cable
- MicroSD adapter
- wireless remote and charger
- battery charger
- monopod

*This equipment is only available for checkout for more advanced camera users. Contact a TLC Employee for more info.
Additional GoPro Accessories

Need more control over your shots? Check out these accessories for GoPros.

Ask a TLC Staff member for more information.

Voice Activated Remote
Activate your GoPro from a distance using your voice.

Clamp
Use it to hold your GoPro in place.

Head Strap and Quick Clip
Attach your GoPro to your head or clip it to your hat.

Chest Mount
Attach your GoPro around your chest.
Floatie
Floats your GoPro in the water.

Joby Flexible Tripod
Flexible tripod that can attach to different surfaces.

Quik Key MicroSD Card
Import your files directly to your iPhone!

Sidekick
Take more shots during the night with the flash.

Birdie
Release your GoPro from somewhere high.
Audio Equipment

Polsen Mic
Lavalier Microphone

Attach a lavalier microphone to your camera for more clear, precise audio recording. Comes with an extension cord.

Specs

| Length               | 6m (without extension cord) |

Sennheiser
Wireless Microphone

Lightweight camera-mount receiver that features an all-metal housing. It captures audio in any filming that features distance unable to be captured by the camera’s built in microphone or a boom pole. It is often used for capturing audio in interviews. Comes with a camera mount.

Specs

| Working distance | Approx. 12.4m |
Zoom H3-VR
Ambisonic Microphone

Used to capture 360-degree audio. Geared toward more detailed sound projects that wish to capture ambient noise. Great for VR or AR projects.

**Specs**

- **Modes**: Ambisonics, Binaural, Stereo
- **Memory card slot**: MicroSD

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Zoom H6
Audio Recorder

The Zoom H6 is a handheld audio recorder that lets you quickly record up to six input signals. This device is perfect for bands, multi-instrumentalists, and podcaster. Our bag comes with swappable capsules that help you capture audio depending on your specific project needs.

**Specs**

- **Number of tracks**: WAV: 6 | MP3: 2
- **Recording time**:
  - WAV 44.1 kHz/16-Bit:
    - 1hr 34min per GB (stereo)
  - MP3 128 kb/s:
    - 17hrs 21.5min per GB (stereo)
Rode
VideoMic Pro
Shotgun microphone

Rode’s VideoMic Pro is a condenser shotgun microphone used with our DSLRs. The microphone will help improve the overall quality of your audio, minimizing outdoor environmental noise such as wind.

Sony Recorder
Voice Recorder

Portable, easy to manage audio recording. Files export as MP3 via USB on device. Includes lavalier microphone with extension cable. Great for more basic audio projects and interviews.

Specs

- Built-in memory: 4 GB
- Memory card slot: microSD
Tascam

Voice Recorder

More advanced voice recorder optimized for higher quality audio recording. It supports a 24-bit/192 kHz recording resolution and is able to record both MP3 and WAV files at the same time.

**Specs**

<table>
<thead>
<tr>
<th>Memory Card Slot</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit Depth/Sample Rate</td>
<td>24bit/192 kHz</td>
</tr>
</tbody>
</table>

Audio-Technica

External Microphone

Traditional-feeling microphone that is attachable via USB or XLR. Use it to attach to iPhones or iPads for easier audio recording. Comes with a stand for various height adjustments.

**What comes in the bag**

- Microphone
- USB-A to USB-C Cable
- XLR Cable
- Wind Screen
- Mount
- Stand
- TRS to TRRS Adapter
- Headset
- Lavalier
Headsets

Microsoft headset with microphone, compatible with any device that utilizes a USB.