

**Randolph Township Schools  
Randolph High School  
Media Production II**

*“The medium is the message.”*

-Marshall McLuhan

**Visual and Performing Arts Department**

John DiEgidio, Supervisor

**Curriculum Committee**

Tara Sterling

Janice Finnell

**Curriculum Developed:**

July 2021

**Date of Board Approval:**

September 21<sup>st</sup>, 2021

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Table of Contents**

Section	
Mission Statement.....	3
Affirmative Action Statement.....	3
EDUCATIONAL GOALS .....	4
Introduction.....	5
Curriculum Pacing Chart .....	6
Unit I: Media Law.....	7
Unit II: Video Basics Review .....	10
Unit III: Advanced Editing .....	14
Unit IV: Audio Production .....	18
Unit V: Studio Equipment .....	21
Unit VI: Studio Production .....	25
APPENDIX A: Careers Research Project Sample .....	28

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Mission Statement**

*We commit to inspiring and empowering all students in Randolph schools to reach their full potential as unique, responsible and educated members of a global society.*

**Affirmative Action Statement  
Equality and Equity in Curriculum**

The Randolph Township School district ensures that the district's curriculum and instruction are aligned to the state's standards. The curriculum provides equity in instruction, educational programs and provides all students the opportunity to interact positively with others regardless of race, creed, color, national origin, ancestry, age, marital status, affectional or sexual orientation, gender, religion, disability or socioeconomic status.

N.J.A.C. 6A:7-1.7(b): Section 504, Rehabilitation Act of 1973; N.J.S.A. 10:5; Title IX, Education Amendments of 1972

**Randolph Township Schools  
Randolph High School  
Media Production II**

**EDUCATIONAL GOALS  
VALUES IN EDUCATION**

The statements represent the beliefs and values regarding our educational system. Education is the key to self-actualization, which is realized through achievement and self-respect. We believe our entire system must not only represent these values, but also demonstrate them in all that we do as a school system.

We believe:

- The needs of the child come first
- Mutual respect and trust are the cornerstones of a learning community
- The learning community consists of students, educators, parents, administrators, educational support personnel, the community and Board of Education members
- A successful learning community communicates honestly and openly in a non-threatening environment
- Members of our learning community have different needs at different times. There is openness to the challenge of meeting those needs in professional and supportive ways
- Assessment of professionals (i.e., educators, administrators and educational support personnel) is a dynamic process that requires review and revision based on evolving research, practices and experiences
- Development of desired capabilities comes in stages and is achieved through hard work, reflection and ongoing growth

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Introduction**

Media Production II is a full-year course designed for students to continue to develop and advance their skills from Media Production I. Students will be introduced to the legal aspects of media and the responsibility of the Federal Communications Commission. Video equipment, composition, and script writing will be the focus throughout this course. Students will also advance their editing skills through media production projects that require more of an emphasis on post-production. An introduction to the operation of the Ramcast Studio and RAM-TV Studio will be a highlight to this course. Students will be able to engage in the creation of various audio and video projects that will utilize both studios throughout the school year.

Media Production II is aligned to the New Jersey Career & Technical Education Standards and the 2020 New Jersey Student Learning Standards for Visual and Performing Arts. The 2020 NJSL VPA emphasizes the process-oriented nature of the arts and arts learning that guide the continuous and systematic operations of the instructional improvement.

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Curriculum Pacing Chart**

<b>SUGGESTED TIME ALLOTMENT</b>	<b>UNIT NUMBER</b>	<b>CONTENT - UNIT OF STUDY</b>
<b>3 weeks</b>	<b>I</b>	<b>Media Law</b>
<b>3 weeks</b>	<b>II</b>	<b>Video Basics Review</b>
<b>9 weeks</b>	<b>III</b>	<b>Advanced Editing</b>
<b>9 weeks</b>	<b>IV</b>	<b>Audio Production</b>
<b>3 weeks</b>	<b>V</b>	<b>Studio Equipment</b>
<b>9 weeks</b>	<b>VI</b>	<b>Studio Production</b>

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit I: Media Law**

<b>STANDARDS / GOALS:</b>	<b>ENDURING UNDERSTANDINGS</b>	<b>ESSENTIAL QUESTIONS</b>
<p><b>9.3 – Arts, A/V Technology &amp; Communications Career Cluster</b></p> <p><b>9.3.12.AR.4:</b> Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.</p> <p><b>NJ Student Learning Standards VPA 2020: Accomplished</b></p> <p><b>1.2.12Acc.pr6b:</b> evaluate the benefits and impacts at the personal, local and social level from presenting media artworks, such as benefits to people or to a situation.</p> <p><b>1.2.12Acc.re8a:</b> analyze the intent, meanings and influence of a variety of media artworks, based on personal, societal, historical, and cultural contexts.</p> <p><b>1.2.12Acc.cn11a:</b> examine and demonstrate in depth the relationships of media arts ideas and works to various contexts, purposes and values, such as markets, systems, propaganda, truth.</p> <p><b>1.2.12Acc.Cn11b:</b> Critically investigate and ethically interact with legal, technological, systemic, and vocational contexts of media arts, considering ethics, media literacy, digital identity, and artist/audience interactivity.</p>	Media laws exist for the use of all types of media.	<ul style="list-style-type: none"> <li>• Why is a focus on media law important?</li> <li>• How does media law and media ethics differ?</li> <li>• Why do media laws exist?</li> <li>• What are the most common media laws that high school students face?</li> </ul>
	Freedom of the press/speech is a constitutionally protected right.	<ul style="list-style-type: none"> <li>• Why is enacting media law a balancing act?</li> </ul>
	Regulating media law requires multiple agencies/commissions.	<ul style="list-style-type: none"> <li>• Who is in charge of media law?</li> </ul>
	<b><u>KNOWLEDGE</u></b> <b>Students will know:</b>	<b><u>SKILLS</u></b> <b>Students will be able to:</b>
	The most common problems found in high school student media stem from violating privacy laws, libel, and copyright.	Examine the most common problems found in high school student media.
	Media law indicates what people in media must do according to the FCC, while media ethics indicates what people should do according to a set of guidelines.	Analyze the difference between media law and media ethics.

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit I: Media Law**

	<p>Mass media ethics guidelines include the following: 1) Do not publish or broadcast anything which is obscene. 2) Avoid prejudice. 3) Do not inquire into an individual's private life without the person's consent. 4) Apply discretion in the use of pictures and names to avoid harming the person concerned.</p> <p>The statements in the eight codes of media ethics specify core moral norms (autonomy, beneficence, non-maleficence, and justice), core behavioral norms (veracity, privacy, confidentiality, and fidelity), and other norms.</p> <p>The Media Bureau of the FCC administers policy and licensing programs relating to the media industry. The FTC, on the other hand, helps protect consumers against media fraud, the collection of personal user data, and other debatable practices.</p> <p>There are multiple factors to consider when making decisions about the legality and ethics of media.</p>	<p>Discuss how media ethics apply to different media, such as television, film, and the internet.</p> <p>Explain how media ethics promote and defend core values such as a universal respect for life.</p> <p>Analyze how the eight codes of media ethics specify core moral norms, core behavioral norms, and other norms.</p> <p>Understand the roles that the FCC and FTC currently play in media law and how/why these roles may change in the future.</p> <p>Make professional-level decisions about media production, taking into consideration a variety of social, legal, and ethical factors.</p> <p>Work collaboratively and practice making decisions about media controversies.</p>
--	---	---



**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit I: Media Law**

	<b>KEY TERMS:</b> bias, Code of Ethics, copyright, defamation, slander, libel, Doctrine of Prior Restraint, ethics, Fairness Doctrine, Federal Communications Commission (FCC), Federal Trade Commission (FTC), Fifth Estate, First Amendment, Fourth Estate, good faith, payola, privacy, Shield laws, standards, net neutrality	
<p><b>ASSESSMENT EVIDENCE: Students will show their learning by:</b></p> <ul style="list-style-type: none"> <li>Formulating professional-level responses to media law and ethics cases, both real and imagined.</li> <li>Analyzing limitations in current FCC and FTC oversight of mass media, especially considering changes to broadband technology and issues such as net neutrality and proposing solutions to them.</li> </ul> <p><b>KEY LEARNING EVENTS AND INSTRUCTION:</b></p> <ul style="list-style-type: none"> <li>Compare and contrast recent media law case studies through class discussions.</li> <li>Class activities to help predict how media law might need to change in the future given recent advances in technology and formatting.</li> </ul>		
<b>SUGGESTED TIME ALLOTMENT</b>	<b>3 weeks</b>	
<b>SUPPLEMENTAL UNIT RESOURCES</b>	<a href="https://accountablejournalism.org/ethics-codes/Kenya-Mass-Media">https://accountablejournalism.org/ethics-codes/Kenya-Mass-Media</a> <a href="https://www.ndsu.edu/pubweb/~rcollins/431ethics/codes.htm">https://www.ndsu.edu/pubweb/~rcollins/431ethics/codes.htm</a> <a href="https://www.boscolegal.org/court-resources/social-media-case-law/">https://www.boscolegal.org/court-resources/social-media-case-law/</a> <a href="https://cielo24.com/2021/06/gimlet-media-case-study-the-importance-of-podcast-accessibility/">https://cielo24.com/2021/06/gimlet-media-case-study-the-importance-of-podcast-accessibility/</a> Articles and handouts on media law case studies	

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit II: Video Basics Review**

<b>STANDARDS / GOALS:</b>	<b>ENDURING UNDERSTANDINGS</b>	<b>ESSENTIAL QUESTIONS</b>
<p><b>9.3 CAREER CLUSTER: ARTS, A/V TECHNOLOGY &amp; COMMUNICATIONS (AR)</b></p> <p><b>9.3.12.AR.1:</b> Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR.2:</b> Analyze the importance of health, safety and environmental management systems, policies and procedures common in arts, audio/video technology and communications activities and facilities.</p> <p><b>9.3.12.AR.4:</b> Analyze the legal and ethical responsibilities required in the arts, audio/visual technology and communications workplace.</p> <p><b>9.3.12.AR-AV.2:</b> Demonstrate the use of basic tools and equipment used in audio, video and film production.</p> <p><b>9.3.12.AR-AV.3:</b> Demonstrate technical support skills for audio, video and/or film productions.</p> <p><b>9.3.12.AR-AV.4:</b> Design an audio, video and/or film production.</p> <p><b>VISUAL AND PERFORMING ARTS (VPA): ACCOMPLISHED</b></p> <p><b>1.2.12Acc.Cr1b:</b> Organize and design artistic ideas for media arts productions.</p>	Proficient operation of video equipment is required to be a successful videographer.	<ul style="list-style-type: none"> <li>Why is it important that videographers demonstrate proper operation of video production equipment?</li> </ul>
	Different types of shot composition have different positioning of the camera lens and subjects to enhance a production.	<ul style="list-style-type: none"> <li>How do shot sizes, frames, focus, angles, and movement differ?</li> </ul>
	Various shot compositions create opportunities for storytelling.	<ul style="list-style-type: none"> <li>How can videographers enhance their productions?</li> </ul>
	Script writing is an important step of the production process.	<ul style="list-style-type: none"> <li>Why is script writing the most important step in the production process?</li> </ul>
	Production roles are required in all stages of production.	<ul style="list-style-type: none"> <li>How are the production roles integrated throughout the production process?</li> </ul>
	<b><u>KNOWLEDGE</u></b> <b>Students will know:</b>	<b><u>SKILLS</u></b> <b>Students will be able to:</b>
	<p>Operating the video camera and setting up the tripod follows specific guidelines to be successful.</p> <p>Camera functions include an auto mode and a manual mode. Manual mode allows the camera operator to adjust white balance, iris, focus, and zoom manually.</p>	<p>Recall the operation of the field video camera and tripod as well as list the parts of the camera and tripod.</p> <p>Identify advanced operational functions on the camera to enhance a production.</p>

# Randolph Township Schools

## Randolph High School

### Media Production II

#### Unit II: Video Basics Review

<p><b>1.2.12Acc.Cr1d:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr2a:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr2c:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr3b:</b> Demonstrate an understanding of media art principles through a selection of tools and production processes.</p> <p><b>1.2.12Acc.Pr5a:</b> Demonstrate effective command of artistic, design, technical and soft skills in managing and producing media artworks.</p> <p><b>1.2.12Acc.Re9a:</b> Create and apply defensible evaluations in the constructive and systematic critique of media artworks and production processes.</p> <p><b>1.2.12Acc.Cn10b:</b> Explain and demonstrate the use of media artworks to synthesize new meaning and knowledge. Reflect and form cultural experiences, such as new connections between themes and ideas, local and global networks, and personal influence.</p>	<p>Different types of microphones are utilized in a production and appropriate audio set-ups depend on the type of production being done.</p> <p>Different types of shot sizes and frames are used in a video production. These include the basic sizes such as medium shot and frames such as point of view.</p> <p>Various types of focus, angles, and movements can be used such as rack focus, high angle, and panning to enhance artistic elements within the composition.</p> <p>Continuity is the ability to keep shots consistent between one another, and matching action is having movements of subjects or object flow between each shot.</p> <p>There are different rules of composition in video production to ensure you have the best shot possible including but not limited to rule of thirds, head room, lead room, look room, and depth of field.</p>	<p>Identify the pieces of audio equipment used in a field production.</p> <p>Demonstrate the proper operation of audio equipment based on the production.</p> <p>Demonstrate the use of the various shot sizes and frames used in video production.</p> <p>List the various shot focus, angles, and movements to utilize in a video production.</p> <p>Explain the difference between continuity and matching action.</p> <p>Recall the rules of composition in video production and how to apply them.</p>
---	--	---

**Randolph Township Schools**  
**Randolph High School**  
**Media Production II**

**Unit II: Video Basics Review**

	<p>Having assigned production roles is important in a team to have a successful process throughout all stages. During each stage there are different roles that need to be filled. Pre-production (scriptwriter), production (camera operator) and postproduction (video editor).</p> <p>The script writing process is broken down into four steps. Step 1 is assigning the production roles, step 2 is the brainstorming and pitching of the idea, step 3 is completing an outline for the ideas, and step 4 is writing the script.</p> <p>Different types of scripts can be used depending on the type of production. The two most common types of scripts are the outline script which is good for lots of dialogue and the shot-list script which is good for in-depth video description.</p>	<p>Name the different production roles that need to be filled throughout the production process.</p> <p>Recall the script writing process in the pre-production stage of a video production.</p> <p>Identify what script format is appropriate for each type of production.</p>
	<p><b>KEY TERMS:</b> lens, fold out screen, viewfinder, zoom control, focus control, tripod legs, tilt lock, pan lock, panhandle, voice over, background sound, NAT sound, room tone, microphone, dynamic microphone, condenser microphone, omni-directional mic, directional mic, hyper-cardioid mic, super-</p>	

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit II: Video Basics Review**

	cardioid mic, shotgun, lavalier, handheld, wireless receiver, wireless transmitter, director, script supervisor, camera operator, talent, script writer, video editor, crew, pre-production, production, post-production white balance, manual focus, manual zoom, iris, outline script, shot-list script	
<p><b>ASSESSMENT EVIDENCE: Students will show their learning by:</b></p> <ul style="list-style-type: none"> <li>Recreating a scene by writing a short script, filming them, and editing to demonstrate shot composition, rules, and match action editing.</li> </ul> <p><b>KEY LEARNING EVENTS AND INSTRUCTION:</b></p> <ul style="list-style-type: none"> <li>Group activities to explore the parts of a camera and identifying new camera shots for shooting in manual mode.</li> <li>Small group demonstrations of proper field equipment setups.</li> <li>Small group class discussions on the various shot compositions in a video production.</li> </ul>		
<b>SUGGESTED TIME ALLOTMENT</b>	<b>3 Weeks</b>	
<b>SUPPLEMENTAL UNIT RESOURCES</b>	<a href="#">Camera Controls &amp; Settings - Videomaker</a> <a href="#">Audio Techniques for Going Pro - Videomaker</a> <a href="#">Basic Audio for Video - Videomaker</a> <a href="#">Rules of Shot Composition in Film: A Definitive Guide (studiobinder.com)</a> <a href="#">Camera angles - a complete guide - Videomaker</a> <a href="#">Camera movement: 11 techniques you should master - Videomaker</a> <a href="#">What is composition and why is it essential in filmmaking? - Videomaker</a> <a href="#">7 Rules For Better Shot Composition and Framing   Motion Array</a>	

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit III: Advanced Editing**

<b>STANDARDS / GOALS:</b>	<b>ENDURING UNDERSTANDINGS</b>	<b>ESSENTIAL QUESTIONS</b>
<p><b>9.3 CAREER CLUSTER: ARTS, A/V TECHNOLOGY &amp; COMMUNICATIONS (AR)</b></p> <p><b>9.3.12.AR-AV.2:</b> Demonstrate the use of basic tools and equipment used in audio, video and film production.</p> <p><b>9.3.12.AR-AV.3:</b> Demonstrate technical support skills for audio, video and/or film productions.</p> <p><b>9.3.12.AR-AV.4:</b> Design an audio, video and/or film production.</p> <p><b>VISUAL AND PERFORMING ARTS (VPA): ACCOMPLISHED</b></p> <p><b>1.2.12Acc.Cr1b:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr1d:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr2a:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr2c:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr3b:</b> Demonstrate an understanding of media art principles through a selection of tools and production processes.</p>	Various types of video and audio effects creates a visually appealing final piece.	<ul style="list-style-type: none"> <li>How can a video editor enhance a video in post-production?</li> </ul>
	Advance editors who want to enhance their video in post-production will need to expand their toolbox of effects	<ul style="list-style-type: none"> <li>Why are there different types of keying effects and what do they do?</li> <li>When would a video editor adjust the color to make the clips appear darker?</li> <li>What reasons would a video editor need to make audio adjustments or add effects?</li> </ul>
	Video editors need to be able to streamline their editing time to be efficient and productive.	<ul style="list-style-type: none"> <li>Why is efficiency and productivity important as a video editor?</li> </ul>
	<b><u>KNOWLEDGE</u></b> <b>Students will know:</b>	<b><u>SKILLS</u></b> <b>Students will be able to:</b>
	By adding different video and audio effects to clips in post-production can enhance the final piece by creating a more professional looking video. These types of effects can only be achieved in editing.	Demonstrate techniques used in editing in Adobe Premiere to enhance storytelling visually.

**Randolph Township Schools**  
**Randolph High School**  
**Media Production II**

**Unit III: Advanced Editing**

<p><b>1.2.12Acc.Pr5a:</b> Demonstrate effective command of artistic, design, technical and soft skills in managing and producing media artworks.</p>	<p>Basic filters including blurs and color corrections or more advance effects like color keying using a green screen or isolating color can be applied as video effects.</p> <p>Audio effects can help video editors adjust audio that may otherwise be difficult to correct. Audio effects can also be used as filters to alter the sound of the audio purposely.</p> <p>Color keying is a video effect in Adobe Premiere Pro that is used to transform a solid color into any background. To use this feature the subject must be filmed in front of a green screen and the color effect applied in post-production.</p> <p>Adjusting color to a clip can correct either an under- or over-exposed clip but it also can be done to change the mood of the clip. Brightening a clip and making it more colorful creates a different feel than darkening a clip and adding a greyscale to it.</p> <p>Audio can be difficult to perfect while recording so there are times in post-production where corrections need to be made. These types of adjustments can be found in essential sounds where Adobe Premiere Pro can analyze the audio clip and make the corrections needed automatically.</p>	<p>Apply different video effects to a project in post-production.</p> <p>Utilize the different audio effects to alternate and/or enhance recorded audio.</p> <p>Describe what color keying is and how to key a background using a green screen in Adobe Premiere Pro.</p> <p>Create different stylized looks using color adjustments to enhance the mood of a video.</p> <p>Construct audio mix adjustments by altering audio to enhance the auditorial effects of a video.</p>
--	---	---

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit III: Advanced Editing**

	<p>Essential graphics are available in an editable template, but they can be enhanced by adding special motions and transitions to them by using video effects to adjust motions.</p>	<p>Apply motion animations to text graphics and transitions to enhance the visual storytelling of a video.</p>
	<p><b>KEY TERMS:</b> video effects, video transitions, audio effects, audio transitions, color keying, chroma key, green screen, luma key, track matte key, ultra key, crossfade, dissolve, wipe, slide, 3D motion, color correction, color adjustment</p>	
<p><b>ASSESSMENT EVIDENCE: Students will show their learning by:</b></p> <ul style="list-style-type: none"> <li>• Creating a music video production project utilizing the green screen to apply chroma key backgrounds in post-production.</li> <li>• Creating a trailer video production project for a new TV show or movie utilizing different post-production effects for video and sound to add a stylized look to the final piece.</li> </ul> <p><b>KEY LEARNING EVENTS AND INSTRUCTION:</b></p> <ul style="list-style-type: none"> <li>• Work through various Adobe Premiere Pro tutorials focused on various topics including but not limited to: <ul style="list-style-type: none"> <li>○ How to create animation presets for title graphics</li> <li>○ How to make natural color adjustments to clips</li> <li>○ Creating a green screen key using the ultra-key effect</li> <li>○ Understanding audio levels and audio effects in Premiere Pro</li> <li>○ How to reduce noise and reverberation and the audio track mixer in Premiere Pro</li> </ul> </li> <li>• Participate in teacher-led demonstrations and hands on experiences that focuses on the various components of Adobe Premiere Pro.</li> </ul>		



**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit III: Advanced Editing**

<b>SUGGESTED TIME ALLOTMENT</b>	<b>9 Weeks</b>
<b>SUPPLEMENTAL UNIT RESOURCES</b>	<a href="#">How to create animation presets   Adobe Premiere Pro tutorials</a> <a href="#">How to make natural color adjustments   Adobe Premiere Pro tutorials</a> <a href="#">Automatically match colors in Premiere Pro   Adobe Premiere Pro tutorials</a> <a href="#">Creating a green screen key using Ultra key in Premiere Pro (adobe.com)</a> <a href="#">Understand audio levels in Premiere Pro CC   Adobe Premiere Pro tutorials</a> <a href="#">Discover audio effects in Premiere Pro   Adobe Premiere Pro tutorials</a> <a href="#">Reduce noise and reverberation in Premiere Pro   Adobe Premiere Pro tutorials</a> <a href="#">Discover the Audio Track Mixer in Premiere Pro   Adobe Premiere Pro tutorials</a>

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit IV: Audio Production**

<b>STANDARDS / GOALS:</b>	<b>ENDURING UNDERSTANDINGS</b>	<b>ESSENTIAL QUESTIONS</b>
<p><b>CAREER CLUSTER: ARTS, A/V TECHNOLOGY &amp; COMMUNICATIONS (AR)</b></p> <p><b>9.3.12.AR.1:</b> Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR.6:</b> Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR-AV.2:</b> Demonstrate the use of basic tools and equipment used in audio, video and film production.</p> <p><b>9.3.12.AR-AV.3:</b> Demonstrate technical support skills for audio, video and/or film productions.</p> <p><b>9.3.12.AR-AV.4:</b> Design an audio, video and/or film production.</p> <p><b>VISUAL AND PERFORMING ARTS (VPA) ACCOMPLISHED</b></p> <p><b>1.2.12Acc.Cr1a:</b> Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.</p> <p><b>1.2.12Acc.Cr1b:</b> Organize and design artistic ideas for media arts productions.</p>	The advancements in radio technology led to the digital era.	<ul style="list-style-type: none"> <li>How has technological advancements changed radio over the years?</li> </ul>
	Podcasts provide a unique listening experience to the specific listener.	<ul style="list-style-type: none"> <li>What makes podcasts unique among other forms of mass media?</li> </ul>
	New technologies can help to sustain the audio medium for the future.	<ul style="list-style-type: none"> <li>How will new radio technologies affect traditional radio broadcasting in the next decade?</li> </ul>
	<p><b><u>KNOWLEDGE</u></b> <b>Students will know:</b></p>	<p><b><u>SKILLS</u></b> <b>Students will be able to:</b></p>
	<p>Radio has an advantage over other types of media that require an individual's full attention, such as television or print.</p> <p>The Golden Age of Radio covered the period between 1930 and 1950. It was characterized by radio's overwhelming popularity and a wide range of programming, including variety, music, drama, and theater programs.</p>	<p>Compare and contrast the future of radio.</p> <p>Explain what the golden age of radio was.</p>

# Randolph Township Schools

## Randolph High School

### Media Production II

#### Unit IV: Audio Production

<p><b>1.2.12Acc.Cr1d:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr2a:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr2b:</b> Critique plans, prototypes, constraint of resources, and production processes considering purposeful and expressive artistic intention and personal aesthetic.</p> <p><b>1.2.12Acc.Cr2c:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr3a:</b> Apply ideas with deliberate choices in organization, integrating content and stylistic conventions.</p> <p><b>1.2.12Acc.Cr3b:</b> Demonstrate an understanding of media art principles through a selection of tools and production processes.</p> <p><b>1.2.12Acc.Crc:</b> Refine and elaborate aesthetic elements and technical components. Intentionally form impactful expressions in media artworks for specific purposes, intentions, continuity, juxtaposition, audiences and contexts.</p> <p><b>1.2.12Acc.Pr4a:</b> Integrate various arts, media arts forms and academic content into unified media arts productions that retain thematic integrity and stylistic continuity, such as transmedia productions.</p> <p><b>1.2.12Acc.Pr5a:</b> Demonstrate effective command of artistic, design, technical and soft skills in managing and producing media artworks.</p>	<p>Large businesses saw potential profitability and formed their own networks narrowing the market. Media conglomerates absorbed many independent radio stations into single companies.</p> <p>Internet radio and podcasting have allowed many new programs and stations to be broadcast at low cost.</p> <p>The main components of the audio board are the mic channel buttons, mic channel faders, LCD touchscreen and sound pads.</p> <p>Adjusting appropriate levels for each person talking and adjusting audio files are key components to provide a balanced sound output.</p> <p>The roles in a recording studio are essential to the success of a production. A host is needed for a show and an executive producer needs to run the show.</p> <p>Adobe Audition is an audio editing software program that allows for editing of different sound recordings.</p> <p>In 2005, Apple released iTunes 4.9 with the ability for users to listen to podcasts, and in a few short years, download requests have rose into the billions.</p>	<p>Describe the effects networks and conglomerates had on radio programming.</p> <p>Distinguish the differences between satellite radio, HD radio, Internet radio, and podcasting.</p> <p>Identify main components parts of the audio board in the audio recording studio.</p> <p>Demonstrate the successful recording of audio files in the audio recording studio.</p> <p>Define the different audio production roles and responsibilities in a recording studio.</p> <p>Utilize Adobe Audition, the professional tool for precision audio editing, mixing, and sound effects.</p> <p>Discuss the history of the podcast and how it has evolved today.</p>
---	--	--

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit IV: Audio Production**

<p><b>1.2.12Acc.Pr5c:</b> Demonstrate the skillful adaptation and combination of tools, styles and techniques to achieve specific expressive goals in the production of a variety of media artworks.</p>	<p><b>KEY TERMS:</b> broadcast radio, satellite radio, internet radio, podcast, mic channel buttons, mic channel faders, LCD touchscreen, sound pads, record button, headphone output controls, main output control, mute/solo buttons, USB channel, smartphone channel, Bluetooth channel, 3.5mm headphone output, XLR input, 3.5mm TRRS input, 1/4" headphone output, 1/4" speaker outputs, microSD card slot, USB-C connector, DC power connector, host, executive producer, editor, senior producer, producer, engineer</p>	
<p><b>ASSESSMENT EVIDENCE: Students will show their learning by:</b></p> <ul style="list-style-type: none"> <li>Recording a radio commercial or promo using the audio recording studio and editing the final recording in Adobe Audition.</li> <li>Recording an interview podcast using the audio recording studio and editing the final interview in Adobe Audition.</li> </ul> <p><b>KEY LEARNING EVENTS AND INSTRUCTION:</b></p> <ul style="list-style-type: none"> <li>Class discussion to compare the similarities and differences in satellite radio, HD radio, Internet radio and podcasting.</li> <li>Small group activity to pick one of these mediums and predict its future success given its current popularity.</li> <li>Complete an Adobe Audition learning tutorial to get comfortable with navigating through Adobe Audition and learning how to edit within the software.</li> <li>Complete an Adobe Audition learning tutorial on how to create your own podcast using sample files provided from Adobe.</li> </ul>		
<p><b>SUGGESTED TIME ALLOTMENT</b></p>	<p><b>9 Weeks</b></p>	
<p><b>SUPPLEMENTAL UNIT RESOURCES</b></p>	<p><a href="#">Chapter 7: Radio – Understanding Media and Culture (umn.edu)</a>  <a href="#">Audio editing with Adobe Audition   Adobe Audition tutorials</a>  <a href="#">How to create your own podcast   Adobe Audition tutorials</a>  <a href="#">RØDECaster Pro   Learning Hub Home Page   RØDE Microphones (rode.com)</a>  <a href="#">RCP Multitrack Guidelines Audition MAC.pdf (rode.com)</a>  <a href="#">0927-0713-02-05-RØDECaster-Pro-QSG-WEB (rode.com)</a>  <a href="#">The evolution of the podcast (rode.com)</a></p>	

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit V: Studio Equipment**

<b>STANDARDS / GOALS:</b>	<b>ENDURING UNDERSTANDINGS</b>	<b>ESSENTIAL QUESTIONS</b>
<p><b>CAREER CLUSTER: ARTS, A/V TECHNOLOGY &amp; COMMUNICATIONS (AR)</b></p> <p><b>9.3.12.AR.1:</b> Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR.6:</b> Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR-AV.2:</b> Demonstrate the use of basic tools and equipment used in audio, video and film production.</p> <p><b>9.3.12.AR-AV.3:</b> Demonstrate technical support skills for audio, video and/or film productions.</p> <p><b>9.3.12.AR-AV.4:</b> Design an audio, video and/or film production.</p>	Top industry professionals know how to use the right equipment to get the job done.	<ul style="list-style-type: none"> <li>How does effectively using the right equipment impact television studio production?</li> </ul>
	The proper sound adjustments enhance audio.	<ul style="list-style-type: none"> <li>What would a production sound like without the proper audio?</li> </ul>
	A work hierarchy exists that every crew member must follow.	<ul style="list-style-type: none"> <li>Why is it important to know the hierarchy of crew members?</li> <li>Why is it necessary to have an intermediary between the director and crew members?</li> <li>Why can't on-air talent just read off a paper script instead of using a teleprompter?</li> </ul>
	<p><b><u>KNOWLEDGE</u></b> <b>Students will know:</b></p>	<p><b><u>SKILLS</u></b> <b>Students will be able to:</b></p>
<p><b>VISUAL AND PERFORMING ARTS (VPA) ACCOMPLISHED</b></p> <p><b>1.2.12Acc.Cr1a:</b> Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.</p> <p><b>1.2.12Acc.Cr1b:</b> Organize and design artistic ideas for media arts productions.</p>	There are two sides to a production crew: editorial (producer, on-air talent, script writer and video editor) and technical (director, technical director, camera operator, teleprompter operator, floor manager and audio operator).	List and explain the titles and functions of the members of a TV production crew.

# **Randolph Township Schools** **Randolph High School** **Media Production II**

## **Unit V: Studio Equipment**

<p><b>1.2.12Acc.Cr1d:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr2a:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr2b:</b> Critique plans, prototypes, constraint of resources, and production processes considering purposeful and expressive artistic intention and personal aesthetic.</p> <p><b>1.2.12Acc.Cr2c:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr3a:</b> Apply ideas with deliberate choices in organization, integrating content and stylistic conventions.</p> <p><b>1.2.12Acc.Cr3b:</b> Demonstrate an understanding of media art principles through a selection of tools and production processes.</p> <p><b>1.2.12Acc.Crc:</b> Refine and elaborate aesthetic elements and technical components. Intentionally form impactful expressions in media artworks for specific purposes, intentions, continuity, juxtaposition, audiences and contexts.</p> <p><b>1.2.12Acc.Pr4a:</b> Integrate various arts, media arts forms and academic content into unified media arts productions that retain thematic integrity and stylistic continuity, such as transmedia productions.</p>	<p>The technical director takes cues from the director and plays a crucial role in the production process.</p> <p>The camera operator operates the studio cameras and must know how to use all parts (including the viewfinder and teleprompter monitor) to properly frame and focus on a subject.</p> <p>The director ensures that the producer's vision is delivered during production (filming) while the technical director takes cues from the director in switching between video sources and is responsible for the on-air product.</p> <p>The audio operator is responsible for controlling the audio levels in the control room using the audio mixer/control, volume unit meter, and microphones.</p> <p>The teleprompter operator often uses Flip-Q to customize the displayed script on a teleprompter screen which helps ensure that the talent's speech will be consistent and accurate as well as appear spontaneous.</p>	<p>Identify the difference between the director and the technical director.</p> <p>Demonstrate basic operation of a studio camera, by operating the camera and identifying correct camera framing in the studio.</p> <p>Compare and contrast the roles of the director and technical director.</p> <p>Identify who oversees the audio board operation, operate the audio board in the control room, and properly mic up a subject.</p> <p>Identify whose job it is to operate the teleprompter and how it functions in tandem with Flip-Q.</p>
--	--	--

# **Randolph Township Schools** **Randolph High School** **Media Production II**

## **Unit V: Studio Equipment**

<p><b>1.2.12Acc.Pr5a:</b> Demonstrate effective command of artistic, design, technical and soft skills in managing and producing media artworks.</p> <p><b>1.2.12Acc.Pr5c:</b> Demonstrate the skillful adaptation and combination of tools, styles and techniques to achieve specific expressive goals in the production of a variety of media artworks.</p>	<p>It is important that even those who are not directors be aware of the direction cues because all crew need to understand the language and know the order of operations, especially when the director is beginning and ending the show.</p>	<p>Give proper directing cues to the crew to have a controlled and smoothly run production.</p>
	<p>The floor manager is responsible for relaying cues from the director to the talent during production using hand signals for pacing and time cues.</p>	<p>Identify and demonstrate the hand signals given by the floor manager on the studio set</p>
	<p><b>KEY TERMS:</b> editorial staff, technical staff, producer, talent, host, news anchor, reporter, script writer, video editor, director, technical director, camera, teleprompter operator, floor manager audio operator, studio camera, viewfinder, teleprompter monitor, pan-handle, studio tripod, rear zoom control, rear focus control, wide shot, medium shot, medium close up, head room, look room, tilt, pan, zoom, cross camera staging, video switcher, bus, A bus, B bus, preview, program, fader lever, black online, audio mixer, volume meter unit, individual audio controls, subgroup controls, main mix control, lavalier microphone, XLR cable, Flip-Q, que, speed, space bar, up arrow, down arrows, director cues, standby, fade up, open mic, cue script, close mics, fade to black, cut talent, floor manager, hand cues</p>	

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit V: Studio Equipment**

**ASSESSMENT EVIDENCE: Students will show their learning by:**

- Creating a presentation that describes a television production career.
- Producing a breaking news report to demonstrate the operation of studio equipment and the workflow of a live studio production.

**KEY LEARNING EVENTS AND INSTRUCTION:**

- With production teams, demonstrate by practicing the operation of the studio cameras.
- With production teams, practice and demonstrate operating the Tricaster as well as the audio board.
- With production teams, practice and demonstrate mic'ing up talent in the studio.
- Working with production teams, take turns practicing the operation of the teleprompter.
- With classmates, review the director cues and floor manager hand signals by creating flash cards and reviewing with a partner.

**SUGGESTED TIME ALLOTMENT**

**4 weeks**

**SUPPLEMENTAL UNIT RESOURCES**

<https://www.wrapbook.com/blog/film-crew-positions>  
<https://www.youtube.com/watch?v=QSc8ej7QyhA>  
<https://www.youtube.com/watch?v=rYafZeiIFwA>  
<https://www.rollingstone.com/culture/culture-news/podcast-how-to-start-best-equipment-804418/>



**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit VI: Studio Production**

<b>STANDARDS / GOALS:</b>	<b>ENDURING UNDERSTANDINGS</b>	<b>ESSENTIAL QUESTIONS</b>
<p><b>CAREER CLUSTER: ARTS, A/V TECHNOLOGY &amp; COMMUNICATIONS (AR)</b></p> <p><b>9.3.12.AR.1:</b> Analyze the interdependence of the technical and artistic elements of various careers within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR.6:</b> Evaluate technological advancements and tools that are essential to occupations within the Arts, A/V Technology &amp; Communications Career Cluster.</p> <p><b>9.3.12.AR-AV.2:</b> Demonstrate the use of basic tools and equipment used in audio, video and film production.</p> <p><b>9.3.12.AR-AV.3:</b> Demonstrate technical support skills for audio, video and/or film productions.</p> <p><b>9.3.12.AR-AV.4:</b> Design an audio, video and/or film production.</p> <p><b>VISUAL AND PERFORMING ARTS (VPA) ACCOMPLISHED</b></p> <p><b>1.2.12Acc.Cr1a:</b> Strategically use generative methods to create multiple ideas and refine artistic goals that increase aesthetic depth.</p> <p><b>1.2.12Acc.Cr1b:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr1d:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p>	Talk shows can also be considered variety talk shows depending on the format the talk show uses.	<ul style="list-style-type: none"> <li>• Why do distinct types of talk shows require different formats?</li> <li>• Why has it been necessary for talk shows to evolve over time?</li> </ul>
	The producer handles various aspects of talk show production from those of the director.	<ul style="list-style-type: none"> <li>• Why is the producer role so important in the production of a talk show?</li> </ul>
	Talk shows engage viewers differently than other TV programs.	<ul style="list-style-type: none"> <li>• Why is filming a talk show different from filming other TV genres?</li> </ul>
	<p><b><u>KNOWLEDGE</u></b> <b>Students will know:</b></p>	<p><b><u>SKILLS</u></b> <b>Students will be able to:</b></p>
	The distinct types of TV programs include unscripted shows like sporting events, game and reality shows, and scripted shows like news, documentaries, variety shows, soap operas, sitcoms, series, cartoons, and talk shows.	Describe the distinct types of TV programs and the difference between an unscripted and scripted show.
	The talk show is one of the most popular types of programs and has a long history that started in the 1950s on television, and before that, in the 1930s on radio.	<p>Compare and contrast the breakdown of several types of talk shows/variety shows.</p> <p>Explain the history of the talk show.</p>

# Randolph Township Schools

## Randolph High School

### Media Production II

#### Unit VI: Studio Production

<p><b>1.2.12Acc.Cr2a:</b> Organize and design artistic ideas for media arts productions.</p> <p><b>1.2.12Acc.Cr2b:</b> Critique plans, prototypes, constraint of resources, and production processes considering purposeful and expressive artistic intention and personal aesthetic.</p> <p><b>1.2.12Acc.Cr2c:</b> Apply aesthetic criteria in developing and refining media arts artwork.</p> <p><b>1.2.12Acc.Cr3a:</b> Apply ideas with deliberate choices in organization, integrating content and stylistic conventions.</p> <p><b>1.2.12Acc.Cr3b:</b> Demonstrate an understanding of media art principles through a selection of tools and production processes.</p> <p><b>1.2.12Acc.Cr3c:</b> Refine and elaborate aesthetic elements and technical components. Intentionally form impactful expressions in media artworks for specific purposes, intentions, continuity, juxtaposition, audiences and contexts.</p>	<p>The format of a talk show features a host leading the discussion and guests sharing their tales of personal tragedy and triumph, such as with “The Oprah Winfrey Show.” The format of a variety talk show also features performance and a looser tone, such as with Jimmy Fallon on “The Tonight Show.”</p> <p>Producing a talk or variety talk show includes five steps. Step 1 is choosing a format, step 2 is hiring one or more hosts and the rest of the staff, step 3 is booking the guests, step 4 is determining the show’s length and segments, and step 5 is writing and editing content.</p> <p>Talk and variety talk shows require using multiple cameras, with the number depending on how many people will be on set during any given segment as well as specific lighting and background adjustments.</p>	<p>Analyze the differences in format of a talk show with that of a variety talk show.</p> <p>Distinguish between the steps for producing a successful talk show.</p> <p>Compare and contrast filming a talk show to filming other TV genres.</p>
<p><b>1.2.12Acc.Pr4a:</b> Integrate various arts, media arts forms and academic content into unified media arts productions that retain thematic integrity and stylistic continuity, such as transmedia productions.</p> <p><b>1.2.12Acc.Pr5a:</b> Demonstrate effective command of artistic, design, technical and soft skills in managing and producing media artworks.</p> <p><b>1.2.12Acc.Pr5c:</b> Demonstrate the skillful adaptation and combination of tools, styles and techniques to achieve specific expressive goals in the production of a variety of media artworks.</p>	<p><b>KEY TERMS:</b> news, documentary, reality, variety, live, soap opera, sitcom, series, cartoon, talk show, unscripted versus scripted TV, format, host, guest, single or multiple cameras, soft light, back light, other-the-shoulder (OTS) camera, diffused or bounced light, natural light, host, guest, talent, talent information sheet, script</p>	

**Randolph Township Schools  
Randolph High School  
Media Production II**

**Unit VI: Studio Production**

**ASSESSMENT EVIDENCE: Students will show their learning by:**

- Producing a discussion panel segment for a news talk show in studio on a debatable topic of choice.
- Producing an interview segment for a talk show style of choice with a student, teacher, coach, faculty member or someone from the community.

**KEY LEARNING EVENTS AND INSTRUCTION:**

- Watch and compare different types of talk shows
- Watch and discuss the types of segments that talk shows develop
- As a class, analyze the difference between news and entertainment talk shows
- With production teams, develop a talk show idea and present your pitch to the class

**SUGGESTED TIME ALLOTMENT**

**9 weeks**

**SUPPLEMENTAL UNIT RESOURCES**

"How to Film a Talk Show" <https://www.youtube.com/watch?v=tdfmH6Beh1Y>  
<https://www.oprah.com/app/the-oprah-winfrey-show-full-episodes.html>  
<https://www.nbc.com/the-tonight-show/episodes>  
<https://www.sfgate.com/entertainment/article/The-difference-between-reality-unscripted-TV-3185380.php>  
<https://www.amazon.in/Show-Runner-Producing-Variety-Television-ebook/dp/B00K6YZGUO>

# Randolph Township Schools

## Randolph High School

### Media Production II

## APPENDIX A: Careers Research Project Sample

### TV STUDIO PRODUCTION CAREERS RESEARCH PROJECT

You will create a presentation that describes a television production career that you are interested in. Your grade will be determined by the neatness of your presentation, correct spelling, and grammar, meeting all the requirements for the presentation, and the presentation to the class.

#### REQUIREMENTS FOR THE PRESENTATION

- You must have a title slide and a conclusion slide.
- You must have at least 10 slides. You may use more if you want.
- You should apply a template to your presentation. Choose one that you like.
- Use several different slide layouts throughout your presentation.
- Add clip art/pictures to your slides.
- When creating your presentation, remember the Rule of 7's. No more than 7 lines of text.
- per slide and no more than 7 words on a line.

#### SLIDES THAT SHOULD BE INCLUDED IN YOUR PRESENTATION:

1. Career Title Slide – should have the career title and your name
2. Description Of The Career
3. Education—what type of education do you need? University? A Trade? College?
4. What are the opportunities and requirements for advancement?
5. Skills—what skills are needed?
6. Salary- How much will you earn working in your chosen profession?
7. Conclusion Slide – What is an average day like for someone in this career? Why did you choose this career?
8. Sources- include a list of websites that you used to find out your information.

#### YOUR LIST OF CAREERS TO CHOOSE FROM:

- |                 |                         |
|-----------------|-------------------------|
| ● Producer      | ● Director              |
| ● Talent        | ● Technical Director    |
| ● Host          | ● Camera Operator       |
| ● News Anchor   | ● Teleprompter Operator |
| ● Reporter      | ● Floor Manager         |
| ● Script Writer | ● Audio Operator        |
| ● Video Editor  | ● Production Assistant  |

*PLEASE NOTE: This is for Television Studio Production Careers!*

GRADING RUBRIC ON NEXT PAGE...

# Randolph Township Schools

## Randolph High School

### Media Production II

## APPENDIX B: Music Video Chroma Key Project Sample

### Music Video - Lip Sync Battle

**Objective:** To make a music video from one of your favorite songs; to keep the beat and practice fast-paced editing as well as editing using Chroma Key on a green screen through Final Cut Pro. Use playback to sync actions and lips to song. Lip-synching must be in the chorus of the song.

**What this project is about:** A music video offers ample chances to work whatever you want into the film, linking a wide array of unusual images together under the umbrella of the music track. As with most videos, the aim is to convey the ideas and atmospheres of the piece of music with images that complement it or set off new meanings of it.

**Preproduction:** Pick a song everyone can agree on. This can be difficult but when everyone likes the song, they won't mind listening to it several times during filming and editing. Choose a location that you and your crew can easily travel to and make sure you are granted permission prior to filming in any locations that require permission. Have fun with costumes and props. These items add to the believability of your performance.

**Production:** TAKE YOUR PHONE OR BLUE-TOOTH SPEAKER. Make sure you and your team can hear the song so they can sync their performances well with the song. You will perform this song many times from different angles and perhaps from different locations. Perform the song well. Sing out loud! Direct while you are filming; you are going to drop the audio anyways.

**Post Production:** You should have plenty of footage to intercut if you filmed several times. Edit linear down the timeline. Add titles and transitions as you edit so you won't have to rematch everything. You will be changing your image every 3 seconds for the duration of the song. Match "performance" clips like lip-synching or matching the play of the instruments.

**Criteria:** Song must be at least 2:30 in length. Lip Sync should be the chorus of the song and filmed in front of the green screen. Costumes, props and location will be a must for the believability of your performance. You cannot edit the song in anyway: No bleeping, trimming, or fading of any kind. Rap is difficult to sync.

#### TECHNICAL CRITERIA REQUIRED

- Multiple locations
- Multiple angles
- Multiple shot sizes