IREX is an international nonprofit organization providing thought leadership and innovative programs to promote positive lasting change globally. We enable local individuals and institutions to build key elements of a vibrant society: quality education, independent media, and strong communities. To strengthen these sectors, our program activities also include conflict resolution, technology for development, gender and youth.
Introduction to Digital Media + Media Convergence

Table of Contents
Introduction to Digital Media + Media Convergence ......................................................... 2
Lesson 1: Overview of digital media .................................................................................. 3
Lesson 2: Assessment of the digital media landscape in your country ................................ 5
Lesson 3: New media and digital journalism tools ............................................................... 7
Lesson 4: What is a digital story? ......................................................................................... 10
Lesson 5: Digital storytelling .............................................................................................. 11
Lesson 6: Video .................................................................................................................... 14
Lesson 7: Interviews ............................................................................................................ 21
Lesson 8: Filming an interview ........................................................................................... 23
Lesson 9: Production ........................................................................................................... 24
Lesson 10: Video Editing ..................................................................................................... 25
Lesson 11: Using Adobe Premiere ....................................................................................... 30
Lesson 12: Photojournalism ............................................................................................... 41
Lesson 13: Telling stories with photos, photo slide shows and captions ........................ 43
Lesson 14: Sound stories .................................................................................................... 44
Lesson 15: Crowdsourcing, information gathering ............................................................. 52
Lesson 16: Digital Journalism Ethics .................................................................................. 54
Lesson 17: Digital Security for Journalists ......................................................................... 56
Lesson 18: Cloud Computing and Storage ......................................................................... 59
Lesson 19: Introduction to Infographics ............................................................................ 61
Lesson 20: Mobile Journalism (MOJO) ............................................................................ 67
Lesson 21: Intro to Data Journalism .................................................................................. 71
Lesson 1: Overview of digital media

Objectives:
- Trainees will become familiar with current media technologies.
- Trainees will learn the knowledge and skills development necessary for a digitally converged environment.
- Trainees will learn the equipment and tools necessary for practicing digital journalism in different media and for different audiences.

Materials: PowerPoint presentation, video demonstrating convergence, video projector, speakers, computers, flipchart markers

Suggested time: 3 hours, divided between two activities:

Session one
A presentation on changes in the fields of communications, changes in media technologies, and how these changes affect media and journalism.

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>10 minutes</td>
<td>What is digital media?</td>
</tr>
<tr>
<td>10 minutes</td>
<td>View examples of digital media to include still images, moving images</td>
</tr>
<tr>
<td></td>
<td>(such as animation and video) and audio</td>
</tr>
<tr>
<td>10 minutes</td>
<td>Discuss where digital media is used, where it is practical, allow each</td>
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<tr>
<td></td>
<td>trainee to use their computer to search the usual news sites to find</td>
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<tr>
<td></td>
<td>different types of digital stories</td>
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<tr>
<td>20-30 minutes</td>
<td>Group activity: Have groups find examples of digital media and identify</td>
</tr>
<tr>
<td></td>
<td>at least three different types of digital stories. (i.e. audio slide show,</td>
</tr>
<tr>
<td></td>
<td>video, timeline)</td>
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</table>

Activity 1

The trainees will be divided into three groups and will discuss the following question using flipcharts: How will digital media changes and technology development affect radio, television and print media in terms of:

Group 1: Content production.
Group 2: Equipment, platforms and delivery tools
Group 3: Personnel, skills and knowledge

After discussing their given topics for approximately 20 minutes, the groups should discuss the following question and prepare to present their answers to the group at large: What should media
outlets do to sustain and grow in the era of digital media and media convergence? What would these changes look like in terms of, equipment, staff, skills, knowledge and tools? Each group will present the results of their work either on sheets of flipchart paper or orally. Their conclusions will be discussed with the group as a whole.

Some points to consider in the discussion:

- The power to document events and personal stories and share them with a global audience has become increasingly more common in the last several years.
- The manufacturing of camera-equipped mobile phones; more affordable, higher quality and lighter-weight cameras; increasing access to the Internet, and nearly instant sharing capabilities has put the ability to create multimedia content into the hands of everyday journalists and citizens.
- These technological advances have increased the popularity of using digital stories as tools for news reporting, advocacy and social change.
- Both digital storytelling and citizen journalism have democratized the flow of information and news in the social media and digital journalism era.
- You no longer need to be a professional film-maker or photographer with tens of thousands of dollars to create something that impacts global audiences and contributes to social and political change.
- Digital storytellers, just like citizen journalists, are generally people who don’t necessarily have professional training but may have attended a workshop or class. After getting this training and creating your own video or photo slide-show, you will become a digital storyteller with a journalist’s skills.
Lesson 2: Assessment of the digital media landscape in your country

Objectives:
- Establish the strengths, weaknesses, opportunities and threats facing digital media in your country.
- Establish the tools, environments and personnel necessary for a vibrant digital media landscape.

Materials: Flipcharts, markers, SWOT (strengths, weaknesses, opportunities, threats) analysis technique

Suggested time: 30 minutes

Activity 1
Divide the trainees into four groups, each group of which will discuss one element of the SWOT analysis.

Suggested time: 15 minutes

Group 1
Strengths:
- What advantages does your country have in terms of a media environment?
- What are the laws and regulations which help and protect digital journalists?
- What unique or low-cost resources are available to you?
- What do people in your media market see as your strengths in digital media?
- What other factors mean that you can create and publish digital media?

Group 2
Weaknesses:
- How can you develop digital media and journalism in your country?
- What practices should be avoided to enhance digital journalism? What are people in your country likely to see as weaknesses among media outlets and journalists?
- What drives your audience away?

Group 3
Opportunities:
- What opportunities do you see in your country for the development of digital journalism?
- What interesting trends do you see? Useful opportunities can come from such things as:
  - Changes in technology and audience.
  - Changes in government policy related to freedom of press and media.

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1 For more information on this type of analysis, see: http://en.wikipedia.org/wiki/SWOT_analysis
Changes in social patterns, population profiles, lifestyle changes, etc.
International and regional interest in your country.

Group 4
Threats:
● What obstacles do you face, both legally and technically, in your media outlets?
● What are your competitors doing both in terms of social media and citizen journalism, as well as any other form of journalism you’d quality as digital media.
● Are the quality standards or specifications for your media job, products or services changing?
● Is changing technology threatening your position?
● What are the financial and equipment needs you foresee for the changes in digital media?
● Could any of your weaknesses seriously threaten your digital media business?

Activity 2
Discuss the results of each group’s conclusions

Suggested time: 15 minutes
Lesson 3: New media and digital journalism tools

Objectives:
- Understand and become familiar with digital journalism tools and environment.
- Understand the common processes and elements that digital journalism and traditional journalism share.

Materials: PowerPoint presentation, video projector, computers, Internet access.

Suggested time: 1.5 hours

Session 1
Discuss the development process most journalists follow when producing and publishing a story. For example, what stages are necessary from idea to publication? What type of knowledge is necessary to produce a story in this manner? What tools are used? What skills are necessary? The trainer should note these ideas on a flipchart.

Suggested time: 15 minutes

Session 2
A PowerPoint presentation on the development of digital journalism will be followed by a discussion exploring usage in your regional context, and the tools available for digital journalism. To customize the presentation you may want to consider discussing:

- The development of 1.0 to web 2.0.
- Statistics and infographics on Internet usage in your region and country.
- An overview of the role of new media and social networks in the Arab Spring.
- Examples of stories that were told using mobile phones and web 2.0 from your local context.

Following the presentation, you can discuss some of the basic tools listed below.

Suggested time: 1 hour

Each digital tool has many alternatives and applications. How much of an expert you become will equip you to better tell your story. This is an introduction to different new media tools and their applications in digital journalism. You should practice those you find most useful. Some tools will be more useful than others. The following are a list of commonly used tools that are often a starting point for much digital journalism. The trainer should briefly demonstrate each or at least point out the web resources available on each.

Research:
- Google
- Bing
• Wikipedia
• News alerts
• RSS feeds

Crowd-sourcing or information sharing:
• Google Drive
• Sky Drive
• Dropbox
• Cloud sharing

Social networks:
• Facebook
• Google+
• Twitter
• LinkedIn
• Ning
• Digg

Blogging
• Wordpress
• Blogger

Photo sharing
• Pinterest
• Photobucket
• Picasa
• Instagram
• 500px

Video search and editing
• YouTube
• Vimeo
• Kaltura

Slideshows
• Soundslides
Live streaming

- Bambuser
- Ustream

Mapping

- Google Maps
- Ushahidi

Timelines

- Storify
- Timeline

Other basic equipment for producing a multimedia story:

- Digital camera
- Mobile phone with still and video camera
- Audio recorder
- Mobile phones
- Smart phones capable for use in digital stories production and publishing.
Lesson 4: What is a digital story?

Objectives:
Trainees will implement journalism fundamentals in the development of a digital story.

- Define the different formats of a digital story.
- Define the tools needed to research, develop, produce and publish a digital story

Material: newspaper, blank paper, pens, mobile phones, still cameras, video cameras, computer, basic multimedia production software

Suggested time: 2 hours

Before the lesson, each participant should create a Facebook account with a personal page, a Facebook group, a YouTube account and channel.

Activity 1
Divide into working groups. Each group should search the newspaper for an article which could be developed into a digital story. Define the format for the story you will produce. For example, it can be a video, slide show, audio slide show, etc. In deciding the format, the participants should consider several key questions:

- What is the hook in the story? What makes it interesting?
- Who should be involved in producing the story? Who will conduct the interview, research and find sources?
- What sources of information should we seek? What tools are necessary?
- Where we can film and edit?
- How we will cover it?
- When and where we can publish it?

Activity 2
After answering those key questions, each group will present their story, explain the process they went through and the tools they think are necessary to produce their story. The other groups will critique the stories’ content, the choice of format and tools, and suggest areas for improvement.
Lesson 5: Digital storytelling

Objectives:
- Trainees will understand the importance of digital storytelling in digital journalism.
- Trainees will determine the best formats for digital storytelling.
- Trainees will understand the seven elements of the digital story.

Material: PowerPoint, video projector, flipchart, blank paper, video files

Suggested time: 60 minutes.

Session 1
Present PowerPoint Presentation on digital storytelling, with interactive discussion. Digital stories can be a combination of still photographs and video, or just video or photographs alone. They can include music, narration, interviews, or animation. They can be as simple as sitting in front of your webcam and doing a video-blog about a recent experience, or they can be as complex as documenting the local election process in your town through video, photographs and interviews.

Television commercials use the storytelling framework. Ask the participants for examples from local commercials. Why do most of us effortlessly remember many television commercials? Because the commercial tells a story with which we can identify. Telling a story is the easiest way to get out a message and attract a larger audience. Stories help to make connections and leave lasting impressions.

Journalists can tell three types of stories to communicate their message:

- The story of us (community): The target group for a story. This audience could be disabled people, workers, women, youth, children or civil society at a national or local level. The story is a narration of their challenges and a point of view which reflects the issue told in the story.
- The story of now: This helps to connect a story to the larger world.
- The story of self or personal story: This tells the story about an individual, their mission, objectives, strategy or accomplishments. You could also tell stories through an organization’s staff, their motivations and experiences.

The seven elements of digital storytelling:

1. The content: A compelling story with a point of view
2. Dramatic question: The degree to which it is interesting, dramatic and informative.
4. The gift of your voice: Your personal touch in the story.
5. The media: The production of the story, the way it is crafted and presented.
6. Pacing and action: The speed with which you progress through the story.
7. Economy: The story should be no longer than necessary to convey all the points above.
**Activity 1**

**Suggested time:** 10 minutes

**Material:** Papers or flipcharts, markers, pens

Trainees will identify tools and software necessary in producing various digital stories. The trainees will be divided into three groups; each group will develop a list of the tools used in production of a digital story. In particular, what are the tools and software necessary to produce:

- A photo digital story?
- A soundslides digital story?
- A video digital story?

**Activity 2**

**Materials:** Stories from websites or newspapers, PowerPoint presentation

**Suggested time:** 30 minutes

Divide the trainees into groups. Each will choose a story from a website or the newspaper to develop into a digital story. Each group will:

- Develop a script
- Storyboard the script
- Present to the group as a whole and discuss your ideas.

When providing feedback to each group, the trainer should consider the following elements:

- What is the story about?
  - Use your ears and your eyes: Really listen and watch for where the person’s voice changes, where they sound excited, where their body language changes, etc. What do you want to know more about? Ask them to tell you in one sentence the point of their story. What is clear about the story? What isn’t clear? Why are you telling this story? Why is this important to you?
  - Voice: Does it sound conversational? Is it more of an essay? What words leap out at you?
  - Audience: Who is your audience? What do you want them to think, feel, do after seeing your story?

- How does it flow?
  - Story arc: Does the story have a beginning, middle, and end?
  - How should it be organized?
  - Economy: Is it focused? What can be said with images instead of with words?
Soundtrack: Is there background noise or natural sound that would be appropriate to include? What about music?

- Fine tuning
  - Read the story aloud to recognize which parts flow well or sound awkward.
Lesson 6: Video

Objectives:
- Understand and practice the development of a digital video story
- Get to know the equipment you will use, including simple cameras like a Flip cam and using a mobile phone as a video camera.
- Understand the theory of framing, sequencing, A roll, B roll and short types.

Materials: PowerPoint presentations, sample web videos, how-to video from YouTube, mobile phones or Flip cams, tripod, video projector, sound system.

Suggested time: 3 hours

Start the lesson with the “Digital video filming” PowerPoint presentation.

Activity 1
Show two samples of video stories produced using basic video equipment, like a Flip cam or a mobile phone. Dividing the trainees into working groups to practice the steps for pre-production:

Think of a story that can be turned into a video and develop a scenario and determine what tools are necessary to produce the video.

Activity 2
As each frame is discussed in the PowerPoint presentation, an example should be provided from local media. In the activity we focus on specific techniques, rules and tips for video filming which we should consider in the production of a video story. Each group should discuss the shots they plan to use to produce their digital story following a presentation of the primary shots used in digital stories, listed below.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establishing</td>
<td>Introduces your audience to the location. This could be an extra long shot view of your subject from a distance and/or having them state their name and what they do.</td>
</tr>
<tr>
<td>Observational</td>
<td>Also known as “B-Roll,” shows the interview subject doing something related to the content of the interview. For example, you may have the subject answer a question while conducting an activity related to the interview.</td>
</tr>
<tr>
<td>Interview</td>
<td>This is shot of the subject answering questions with their head directly in the frame. The interviewer may be off camera and the subject on camera. If you plan to show the responses to more than one question, you may switch the camera angle to show facial reactions and body language, as well as perhaps the interviewer’s own reactions</td>
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</tbody>
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More tips for digital video story productions:
- Know your story before you start shooting. Is it a feature? Breaking news?
● Be familiar with the camera. Different cameras have different settings. Don’t rely on automatic settings.
● Get a variety of shots, from a variety of angles. Shoot and edit in sequences and shoot to edit.
● Use the fundamentals of still photography.
● Avoid movement: No pans, tilts, zooms, etc. Don’t edit until movement stops.
● Steady shots: Use a tripod or the ground or a table, etc.
● Hold your shots for at least 10 seconds.
● Get close! Get reactions and emotions.
● Take care to capture sound. It is as important as good video. Wear headphones to monitor sound and avoid interviewing in noisy places.
● Use suitable microphones for each situation.
● Always get at least one more shot than you think you need.

**Activity 3**
Using a mobile phone’s video camera or a Flip cam, conduct the following exercises in groups:

The following exercise focuses on camera handling, zoom and focus pulling, composition and blocking.

**Materials:**
1. Camera and tripod
2. Two talents (participants to be filmed)

**Steps:**
1. Check your settings: 24p /16:9, manual focus
2. Start and end the project with a color bar
3. For every shot, count to 5-7 seconds before cutting.

Take the following shots:
1. Wide Shot 2-SHOT of SUBJECT A and SUBJECT B by the windows. SUBJECT A faces away from SUBJECT B.
2. SHIFT FOCUS CU from SUBJECT A (foreground) to SUBJECT B (background)
3. Medium Shot OF SUBJECT B
4. Close Up OF SUBJECT A
5. Extreme Close Up of SUBJECT B’s lips
6. Extreme Close Up of SUBJECT A’s eyes
7. Medium Shot of SUBJECT B
8. Medium Shot of SUBJECT A then closes eyes
9. Wide Shot 2-SHOT, SUBJECT B approaches SUBJECT A, then stops at a near-distance.
10. Medium Shot of SUBJECT A facing SUBJECT B, OTS
11. REVERSE SHOT Medium Shot of SUBJECT B looking at SUBJECT A, OTS
12. Close Up of SUBJECT B smiles
13. REVERSE SHOT SUBJECT A smiles
14. Wide Shot of SUBJECT A and SUBJECT B FRAMED LEFT,

Camera Mounts

- **Tripod operation:** For the most stable shooting, your camera must be on a tripod. Make sure that you understand how to operate the tripod’s controls before using them. Adjusting the tripod without loosening the appropriate controls can result in permanent damage.
- **Camera tilt adjustment control:** The lever should move smoothly, but not too loose. Experiment to get the feel, as each tripod is different.
- **Camera panning adjustment control** (left and right movement) as above, lever should operate smoothly, but not too loose.

If you want a stable, smooth shot, use a tripod whenever possible. If you do not have a tripod, invent one. Your body is a natural tripod. You can also lean up against a tree or a wall or sit on a chair for stability. Use a wide footprint. People have two legs. Tripods have three. When our legs are several feet apart, creating a wide footprint, we are more stable. It’s the same for a tripod. The farther apart the legs are, the more stable it will be. When you use a tripod, you securely attach the camera to the top of it. The camera can now be moved in two ways – pan (side to side movement) or tilt (up and down).

Basic camera controls: These are standard or basic features on a camera. Your camera may have different features.

- **Viewfinder:** A small eyepiece or screen on the camera that allows you to see the image you’re recording. The camera also acts as a VCR, so you can play back and watch what you have already recorded through the viewfinder.
- **White balance:** If you ever ended up with yellow-tinted video, chances are you forgot to white balance. It’s worthwhile to white balance every time you use your camera to get the highest quality video. If your camera doesn’t have this feature, it may have an automatic or internal system. White balancing adjusts the intensity of the colors being recorded according
to the existing light. Make sure you white balance every time lighting conditions change; if you record video inside and then go outside your lighting conditions have changed and you need to instruct the camera on how to “see” the colors. You can place a piece of white paper under the light you will use for the shot as reference. Focus on the paper in the view finder, and press the “white balance” button. Or you can focus on someone’s white T-shirt (make sure it’s all white). Or, your camera may have an automatic white balance setting you can use by simply adjusting a switch or pressing a button.

- **Battery:** Ensure your power source is charged.
- **Fade:** A gradual increase or decrease of the image and sound. You can fade an image to black or do the reverse.
- **Focus:** There are two ways to focus: auto and manual. When you focus in manual mode, you control the focus. To make sure your shots are in focus, zoom in and focus up close first, then zoom back. This ensures that what you are shooting is best focused. Manual focus is helpful when there is a lot of movement amongst the dominant figures you are filming. When the camera is in auto focus mode it will automatically focus on the dominant figure in the center of the viewfinder. Because it focuses automatically on the dominant figure, it will adjust to whatever becomes dominant. For example, if you are focused on a person several feet away, and someone walks in between the camera and the other person, the camera will adjust to focus on the new dominant figure; the person who walked in front of the camera.
- **High shutter speed:** This feature, usually a button on your camera, allows you to capture objects that are moving at a high speed when you use this feature.
- **Boost (gain) (back light):** This increases light sensitivity for recording in dim conditions. Often results in grainy video.
- **Stand by:** The equivalent of a pause button. This is often faster than using the stop button, because the camera does not have to completely restart the movement of the video tape.
- **Time code:** This is a number (could be seconds or frames) that helps you determine where scenes are located on a video tape. You will see this when you look through your view finder. You can use this, or the counter, when logging your tape and editing.
- **Frame:** A single, complete video image that lasts 1/30th of a second. There are 30 frames in a second. If your camera or editing system can measure frames, you can use this as a counter to log your video tape.
- **Date/clock:** This will show the date and time. Sometimes the date and time will not only appear through the view finder, but also on the video (which you may not want). You can use it as a time reference for logging if your camera does not have time code; just turn it on and then off at the beginning of each shot, or let it stay on.

**Activity 4**

**Lighting**

After reviewing the material below, working groups should practice filming in different lighting environments to see how the camera picks up the light.

Video is a two-dimensional medium. The image projected on a TV screen has height and width, but not depth. Lighting techniques are often used to create the illusion of three dimensions by combining placement with the intensity of the light sources. This section provides an outline of
lighting basics for creating three-dimensional effects by tackling shadows, too-bright light, not enough light and uneven lighting.

- **Base lighting:** Flat or frontal lighting that gives overall brightness, but doesn’t help to create depth. A certain amount of base light is necessary for a video image. Insufficient light will cause video to develop “video noise,” especially in darker areas of the picture.

- **Key lighting:** The main light on the focus of the camera, usually in the form of a spotlight. Lighting from a key is hard and highly directional. Used alone, it creates deep shadows on the opposite side of the talent’s face.

- **Fill lighting:** Partially fills the shadows created by key light. This helps create a three-dimensional look.

- **Back lighting:** Creates a “halo” around the talent’s head and shoulders, helping the subject stand out from the background and increase three dimensionality.

**Lighting tips:**

- Avoid combining natural and artificial light sources because differences in color temperatures will result in tones, usually with an overly red or bluish tint.
- Many public buildings, schools and offices use fluorescent lighting that can have the effect of daylight (lights emitting a blue-white radiance) or incandescent light (lights emitting a softer, yellowish radiance.)
- Do not place subject in front of a window as it will create a dark image and a shadow.
- Fluorescent lighting may flicker on video. If test footage indicates a flickering light, turn off the fluorescents and light the scene with standard incandescent only or move to another location with a different type of lighting.

**Activity 5**

**Sound**

Even though video is primarily a visual medium, the audio portion is just as important. Many unique taping opportunities have been ruined when poor audio accompanies the video. When preparing a digital video story, you should be as familiar with the audio equipment available to you as you are with the camera. Whether it’s a built-in microphone or a clip-on mic, it’s important to understand their best uses. After reviewing the following information, practice interviews with different types of microphones to understand the differences. There are many different types of microphones available to the video producer:

**Camcorder microphones** are built into most video cameras. Although the camera can zoom in on objects from across the room, the built-in mike is better suited to pick up sounds that are closest to it. A better solution is to use an external microphone.

**External microphones** are plugged into the video camera (in some cases, an adapter might be necessary):
• **General-purpose microphones** are all-purpose mikes ideal for placing on mike stands in front of speakers or singing groups. They may also be hand held for interviews or situations where you want to allow different subjects the chance to speak.

• **Lavalier microphones** are small and easily attached to the clothing of the speaker, allowing both hands to be free for demonstration or comfort. The movement of the subject is restricted by the wire connected to the audio switcher.

• **Wireless microphones** provide greater freedom of movement. Wireless microphones use radio frequencies to transmit and receive sound. They come in two basic varieties: VHF (very high frequency) and UHF (ultrahigh frequency). UHF microphones are more expensive, but are much less susceptible to neighboring radio frequencies. VHF microphones are more prone to interference, especially the lower-cost models.

**Microphone Selection**
You should be aware of the differences in pickup patterns when selecting a mike. Pickup patterns are areas around a microphone within which it can receive sound. It’s a good idea to have at least one of each type from the list below, depending upon the type of digital story you will be producing.

• **General-purpose mikes** are reasonably priced and readily available on the market. The most common of these is the Dynamic mike, which is quite rugged and doesn’t require batteries.

• **Omni directional mikes** have a 360-degree pickup radius. They capture sounds from all directions equally, and all sounds are given equal importance. Omnis are considered dynamic mikes.

• **Cardioid mikes** have a semi-directional, heart-shaped pattern, which is excellent for recording narration. The strongest pickup areas range up about 170 degrees in front of the mike, but are diminished from behind.

• **Unidirectional mikes** have a very narrow pickup radius. Mikes on cameras are unidirectional with a narrow pickup straight ahead. Sounds coming from the side or rear are not emphasized.

**Portable sound mixer**: For interviews you may need a two- or three- channel mixer which controls the sound and inputs to the camera.

**Headphones**: Headphones are a necessity for good audio production. The camera operator, as well as an audio operator, should hear the audio quality while there’s still time to make corrections. If a headset source is at the camera, the operator can hear what is actually recorded on tape. Inexpensive headphones will work in most situations, though cup headsets shut out the sound around the camera operator and make it easier to concentrate on the audio track.
**Activity 6**

As a final exercise, create teams in which each individual plays a role: photographer, lighting person, sound person and journalist. The group will film an interview in various locations. With each change in location, they should trade roles so each person has experience with the camera, setting up lighting and audio and conducting an interview.
Lesson 7: Interviews

Objectives:
- Trainee will be able to define the types of interviews necessary for a story.
- Trainees will determine the different interview formats and roles.
- Trainees will use the relevant technical tools and equipment to conduct a video interview.

Material: PowerPoint presentation, video projector, flipchart, blank paper, examples of video, print and slideshow interviews, handout explaining different interviews

Suggested time: 60 minutes

Session 1

Begin the session by explaining the basic principles of interviewing, the different types of interviews and the principles of using each type and how it can be used in the development of a digital story. The basic principles of interviewing in journalism apply in digital media.

The four principles of interviewing:
- Do your homework: Research and carefully prepare.
- Establish a relationship with the source conducive to obtaining information.
- Ask questions that are relevant to the source and that induce the source to talk: Always remember to ask open-ended questions.
- Listen: Be flexible in your questions. A response might trigger a question different from the next one on your list.

Activity 1

Using a good and bad example of an interview, ask the group to critique:
- The questions
- The content of the interview
- The behavior and approach of the interviewee
- The technical approach

Activity 2

Divide trainees into pairs. One person will be the interviewer and the other the subject of the interview. The interviewer will develop questions on a topic to be chosen by the trainer. They will then trade off interviewing one another on the topic to get a feel for what types of questions elicit good responses.

Activity 3

There are numerous best practices to keep in mind when conducting a video interview.

- Plan the interview as part of the story – it should rarely be the whole story.
- Prepare questions: What do you want to achieve from the interview?
- Set a location. Will we be sitting? Standing? Walking?
- What equipment will you need?
• What is the theme of the interview? What is the speed and duration of the interview?
• Research the subject and gauge how they may react to the interview request or to certain questions.

With these principles in mind, pair off into teams of two. One person will play the role of an interviewer and the other a subject. The subject should switch off between being cooperative and non-cooperative. How does their attitude change the way you ask questions?
Lesson 8: Filming an interview

Objective:
- Learn best practices for filming an interview

Material: PowerPoint presentation, how-to video about video interviewing, video projector, sound system, cameras

Suggested time: 60 minutes

Session 1
When conducting an interview, a journalist should bear in mind the following:
- Eye line frame, rule of thirds, head room, looking room, low angle
- Shoulder-mounted camera shooting is an easy and flexible method for recording interviews. Typically this will involve one camera, although others can be added.
- Tripods are important for fixed location interviews.
- Moving interviews are less formal.

After screening a how-to video on the best practices of conducting a basic video interview for a digital video story, discuss:
- Three points lighting and the natural alternatives for lighting when artificial lights aren’t available.
- The 180 degree video filming rule.

Activity 1
Split the participants into groups. Each individual in the group will play a role: interviewer, interviewee, photographer, sound person, producer and lighting person. Create an interview setup in the training hall. Choose the location background, define the main lighting source (key light), as well as fill light and back lighting. Each group should be assigned to different locations in the training room or outside to provide them with different filming scenarios. Now conduct an interview on any topic with the basic equipment. The trainer should provide feedback as they are working. After they are finished, the group should reconvene and compare notes on their experiences:
- What worked?
- What didn’t?
- What are some considerations to keep in mind if there is no natural light?
Lesson 9: Production

Objective:
- Utilizing all the knowledge and skills gained in the last three lessons, produce a video story, which should not exceed 2-5 minutes.

Material: Cameras, lighting and audio equipment (if available)

Suggested time: 4 hours

Activity 1
Again in teams, the groups will work on the production of a story of their choosing, utilizing all the roles and techniques they’ve learned so far. Each group will have 75 minutes to film their story. The group should identify who will play each of the following roles:

- Journalist
- Photographer
- Producer, lighting person
- Sound person

After returning from shooting, the teams will review their material together and define which shoots will be used in the story. It is important that the group identifies the shots they will use in the story, and so will need to log their footage by noting with time stamps and descriptions what is included in the footage. This is called logging. When this is complete, the groups will share their work with the larger training group for feedback and discussion.
Lesson 10: Video Editing

Objectives:
- Trainees will understand and learn different types of video editing.
- Trainees will learn the different media formats, (i.e. video, audio, image, text) and how they are used to compile a video story for different media outlets.
- Trainees will be familiar with basic video editing systems, and be introduced to advanced video editing systems hardware requirements.

Materials: PowerPoint presentation on video editing, video projector, computer loaded with basic and advanced video editing software

Suggested time: 60 minutes

What is editing?
- Arranging, revising, and preparing written, audio or video material for final production, usually by someone (called an editor) other than the creator of the material. The objectives of editing include:
  - Detection and removal of factual, grammatical and typographical errors,
  - Clarification of obscure passages,
  - Elimination of parts not suitable for the targeted audience, and
  - Proper sequencing to achieve a smooth, unbroken flow of narrative.

Editing is the process of organizing and transforming recorded material into a document that delivers a message. At its simplest, video editing means placing one shot after another so that it makes sense while it presents information or a story. At the next level of complexity, editing achieves that organization and presentation invisibly. The audience perceives the program as a simple continuous flow, without noticing that it is carefully built up, one piece at a time, of many separate units of picture and sounds. At its most sophisticated, editing does more than organize information and present it invisibly. It does those jobs with style, with an emotional character that touches viewers’ feelings as well as their minds.

Video editing is part of the creative process that includes writing and directing. In general there are two approaches or styles of editing video:

- **Subtractive editing:** In which a program is assembled by removing unwanted or duplicative sequences. Subtractive editing resembles the way one might assemble a photo album one roll at a time. First you look at all the pictures and discard the ones that contain obvious errors or duplicates. Then you place them in the album according to when they were taken. The problem with this approach is that although it presents a cleaner album than the unedited version, there is no control over when and what occurs because you are limited to the sequence or order in which the pictures were taken.

- **Additive editing:** is the process in which a video program is assembled on tape using pictures, sounds, graphics, titles and effects in a predetermined sequence to create a coherent story.
Editing Principles

Editing Principles determine the qualities that you want in your finished program. These include:

- **Continuity**: Organizing and sequencing a program so that it makes sense to the audience.
- **Performance**: The action on screen must appear believable and should create the intended effect on the audience.
- **Emphasis**: Information should be presented with an impact proportional to its importance. A big bang follows a big event and should serve to direct the audience’s attention to a critical event. Special effects done solely for effect are not relevant.
- **Pace**: The forward movement of the story. It is not related to time but rather to understanding and interest. Variety and rhythm are key elements in pacing a story so that the audience absorbs the message without becoming bored.

Editing is like building rhythm; from the transition of one image to another, or the detailed rhythm of a small sequence of quick precise edits, to the balancing of pace and rhythm in the overall narrative structure, good editing should contribute to the overall storytelling process and not detract from it. When you edit, you are selecting the best sequence of shots for telling a story. In particular we are selecting the precise points at which a shot becomes interesting and the point at which it stops becoming interesting. This natural life span for each shot varies depending on the subject being portrayed – moving shots might last longer than more static shots in which nothing much moves. Successful editing largely depends on the subject matter and intended audience, however it is possible to draw up a set of criteria and guidelines that may help explain some key concepts.

**Try to be invisible**: A good edit is essentially one where the audience isn’t even aware of the edit. The desire to avoid making the edit noticeable is why the simple cut is by far the most common join between clips.

**Develop a shot rhythm**: As a general rule, linger less on close-up shots, but give more time to establishing and wide shots. In the establishing shot there are many more elements for the audience to study and notice. Similarly, change the pace of shots according to the nature of the scene. Most action sequences feature very short clips and fast edits; more complex intimate scenes however may include longer clips and fewer changes of camera angles.

**Maintaining continuity**: The audience should feel they’re part of the story. Edits often strive to maintain continuity during the editing process. Continuity refers to consistency in:

- The picture
- Direction of travel
- The sound
- Camera set-up
- Gesture and motion
When to cut: In general cuts are represented by a sudden change of shot from one viewpoint or location to another. Cutting may introduce a new scene. They may also increase in frequency in an effort to pick up pace, compress time, vary the point of view, or build up an image or idea. There is always a reason for a cut, and you should ask yourself what the reason is before you make it. Cuts are intended to be unobtrusive, except for special dramatic shots. They should support rather than dominate the narrative. Reaction or movement and the use of audio may motivate a cut and help introduce a new sequence.

In matched cuts, a familiar relationship between the shots help make the change seem smooth. For example:

- Continuity of direction
- Completed action
- A similar center of attention in the frame
- A one step change of shot size
- A change of angle

As a general rule of thumb, cut to a different shot:

- If you’ve been filming two individuals, cut between the two.
- If you’ve been in a close-up, cut to a medium or wide shot.
- If you’ve been showing someone looking off-camera, cut to what the person is looking at.

Avoid cutting from one shot of an individual to a similar shot of the same person. Doing so creates a jump cut, a disturbing and seemingly unmotivated splice between shots of the same subject from the same angle. It may be necessary to perform jump cuts for the sake of compressing a long interview into much shorter sound bites, as in the presentation of an oral history. The use of cutaways or employing a simple cross fade may provide a solution.

Here are some more tips to keep in mind:

- Editing pace: Variety and pace often dictate most editing decisions as does the need to hook an audience early on.
- Tight editing: In choosing how to trim and select clips, a general rule is beginning every scene as late as possible and end as soon as possible.
- Variety of shots: It’s useful to have a variety of shot locations, angles and so on. Consideration should be given to the length of shots. In action sequences, preference might be for quick cutting, where each clip in the timeline is only a second or two long. In softer, more peaceful scenes, longer shots may set the mood more effectively. Frequent cuts may be used as deliberate interruptions either to shock, surprise or draw attention.
- Jump cuts: A jump cut represents an abrupt switch from one scene to another, which may be used deliberately to make a dramatic point. It’s sometimes boldly used to begin or end action. Alternatively, it may be the result of poor pictorial continuity, perhaps after deleting a section. In which case the edit may well be masked by a cutaway or reaction shot.
• **Establishing shots**: A general view of a scene can be useful early on in a movie as it may set the geography of a scene and establish who is where. This can give the viewer context against which the story can unfold in closer shots. Furthermore, after a long series of close-ups, you might consider showing another wide shot, to remind the audience of where the characters are and what the world around them looks like.

• **Cutaways and cut-ins**: Cutaways (different shot completely) and cut-ins (closer look at something) are extremely common and effective editing techniques. Not only do they add some variety, but also they let you conceal editing discrepancies. By the time your movie resumes after the cutaway shot, you can have deleted enormous amounts of material, switched to a different take of the same scene, and so on. Cutaways of this nature can also be used as reaction shots, ideal for masking jump cuts.

• **Parallel cutting**: Parallel cutting, or inter-cutting, is often used in the storytelling process as a way of showing two trains of action simultaneously by cutting back and forth between sequences. It can be a useful tool for creating suspense and tension.

• **Montages**: Montages might flash images from memory or condense a history. They can show a process like the development or deterioration of a relationship very rapidly with the use of quick cuts that compare situations and scenes.

• **Linear editing**: The process is primarily mechanical in nature, in that it employs the use of video cameras, VCRs, edit controllers, tilters and mixers to perform the edit functions. This editing technique is performed in linear steps, one cut at a time (or a series of programmed cuts) to its conclusion.

The trainees will primarily work with the following types of editing:

• **In-camera editing**: Video shots are structured in such a way that they are shot in order and of correct length. This process does not require any additional equipment other than the video camera itself, but requires good shooting and organizational skills at the time of the shoot.

• **Assemble editing**: Video shots are not structured in a specific order during shooting but are rearranged and unneeded shots deleted at the time the video is transferred to a computer. This process requires at the least, a video camera and VCR. The original footage remains intact, but the rearranged footage is transferred to a new tape. Each scene or cut is assembled on a blank tape either one-at-a-time or in a sequence.

• **A roll**: Editing from a single source, with the option of adding an effect, such as titles or transitioning from a frozen image the start of the next cut or scene.

• **A/B roll**: Editing from a minimum of two source VCRs or video cameras and recording to a third VCR. This technique requires a video mixer and/or edit controller to provide smooth transitions between the sources. Also, the sources must be electronically synced together so that the record signals are stable.

• **Insert editing**: New material is recorded over existing footage. This technique can be used during the original shooting process or during a later editing process. Since the inserted footage is placed over the unwanted footage some of the original footage is erased.

• **Non-linear editing**: Computer-based video editing, which is almost entirely digital, and employs no mechanical functions except for the input of the video sources and its final output to tape or CD. Editing in this environment is essentially a visual cut-and-paste method.
Given the software available to you, both for free and for purchase, non-linear editing is likely to be your most common method of editing a digital video story. The most commonly used software for purchase for non-linear editing includes:

- **Adobe Premiere** or **Adobe Photoshop Elements** for basic editing
- **Final Cut Pro** or **iMovie** for basic video editing
- **Adobe After Effects** for the addition of cinematic effects
- **Avid Xpress DV**
- **Sony Vegas Pro** for professional-quality editing
- **Canopus Grass Valley Edius** for professional-quality editing
- **Origin Digital** for high-end live streaming
- **Storm Edit** for multiformat editing

Software which is mostly free and can primarily be used for home-use editing:

- **Pinnacle Studio**
- **Ulead Media Studio**
- **Dazzle MovieStar**
- **Movie Maker**
- **AVS Video Editor**

For computer editing, you’ll need the following hardware:

- A source device to play the original tape or disk. Typically a VCR or camera.
- The recommended computer specifications for basic and advanced video editing are an Intel P4 or AMD Athlon with at least a 1 GHz processor. A minimum of 256 MBs of RAM, but with memory prices so cheap, 512 MBs would provide better performance.
- For storage, a minimum of a 30 GB drive, split into two partitions. Partitioned means that the drive is split into two drive letters. The C: partition should be 10 GB and have all your software on it. The remainder of the drive will be called D: Save only video, audio and your saved editing projects on that drive.

Following these guidelines, you will be able to produce about an hour-long video. To capture video from an analogue source you need a video capture device to convert the video into a digital format. Some examples of video cards include: Pinnacle, Matrox, Dazzle and ADS. This can be a standalone device which plugs into the computer or a video capture card which becomes part of the computer. If you are using a source device which outputs a digital signal (such as Firewire or USB) you don’t need a capture device, but you do need to make sure your computer has the appropriate input available.
Lesson 11: Using Adobe Premiere

Objectives:
Trainees will learn basic professional video editing software so they will be able to:

- Edit a video story by:
  - Video capturing and recording, importing different formats of video and media
  - Using A/B ROLL and video tracks
  - Voice over recording and multi sound track editing, and sound fix and mix.
  - Video basic transitions, such as mix, fade in, fade out, etc.
  - Titling and graphics in video story production
  - Key frames and color processing, video effects, speed, transitions.
  - Video exporting to different types of format, print to file, to tape.

- Differentiate video formats and frame sizes, used in different video systems, TV systems, and video sites.

- Publishing video online, uploading video and the appropriate file sizes.

Materials:

- A computer work station for no more than three trainees each, which meets the recommended system requirements available at Adobe.com. The machines must have at least 6 GB of RAM installed, although 12GB is highly recommended. The instructor should also have their own work station that meets the requirements for Adobe Premiere Pro CS6. The student workstations should have headphones for audio monitoring. Students can also use their own computers.
- If possible, all workstations should have a supported CUDA or Open GL graphics card.
- Workstations should have amplified speakers.
- The instructor’s station should have access to the Internet to demonstrate online resources and administer updates as needed. The instructor machines must have at least 8GB of RAM installed although 12GB is highly recommended.
- Video projectors, a screen, sound system, a whiteboard with dry-erase markers, a flipchart with paper and markers should also be available.
- Lighting in the room must be able to be dimmed to improve on-screen readability.

Recommended reading list

- Adobe Premiere Pro CS6: Learn by Video online sources
- Adobe Premiere Pro CS6 Classroom in a Book

Suggested time: 2 training days with 12 sessions.
Adobe Premiere is a good starting point for those new to editing. Prior to the course, trainees should become familiar with the software interface and various tools. To do so, they can view several online how-to videos. Including:

For how-to guides in Arabic, consult the following sources:

- Another useful series of how-to videos in Arabic: [http://www.youtube.com/watch?v=FkgRQKB_skA&list=PLpg_uuOpUTiyTx0E0f5fTyaOqpA2fQoP5](http://www.youtube.com/watch?v=FkgRQKB_skA&list=PLpg_uuOpUTiyTx0E0f5fTyaOqpA2fQoP5)

Shutha.org is a useful free resource for professional training in photography and digital storytelling. A useful video (in English) on Adobe Premiere editing techniques: [http://www.shutha.org/node/710#preparing_media](http://www.shutha.org/node/710#preparing_media).

When reviewing the instructional materials and videos, focus on these core components:

- Project panel
- Timeline
- Source monitor
- Program monitor
- Media browser
- Tools panel
- Effects panel
- Audio mixer

**Session 1: Basic editing elements**

**Suggested time:** 30 minutes.

Trainees will open the software to an existing project, which the trainer has already begun work on. Walk the trainees through the following elements of the software, demonstrating the features with the existing project:

- Computer and editing system hardware
- Monitoring and capture solutions
- Input/output cards
- Meet Adobe Premiere Pro
- Adobe Premiere Pro Interface tour: Control panels, menus, windows, timeline, mixer, key frame and effects, video play window and timeline window.
- The default keyboard shortcuts
• Using workspaces, arranging frames and panels onscreen.

Session 2: Understanding workflow in Adobe Premiere

Suggested time: 45 minutes

The trainer explains the editing workflow to understand the software’s components and how to navigate Adobe Premiere.

• How to create a new project
  o Video rendering and playback settings
  o Video/audio display format settings
  o Capture format settings
  o Scratch disk settings
• Set the specifications of the video and audio references.
• Set the video track and audio track numbers
• Define how you get media, video, images and audio clips, via importing, capturing.

Session 3: Using the software’s features

Suggested time: 90 minutes

1. Using the Source Monitor
   a. Loading a clip
   b. Loading multiple clips
   c. Source and program monitor controls
   d. Playback resolution
   e. Trim, paused resolution, default scale to frame size
   f. Viewing fields
   g. Change magnification
   h. Changing frames in the program or source Monitor

2. Navigating the timeline
   a. What is a sequence?
   b. Opening a sequence in a timeline panel
   c. Understanding tracks
   d. Using time rulers
   e. Understanding the work area
   f. Targeting tracks
   g. In and out points

3. Using markers
   a. Adding markers to clips
b. Adding markers to sequences  
c. Syncing with markers  
d. Interactive markers

4. **Essential editing commands**  
a. Overwrite editing  
b. Insert editing  
c. Three-point editing

5. **An introduction to audio**  
a. Use current sequence  
b. Adjust volume  
c. Add key frames  
d. Add an audio transition

**Session 4: Setting up a project**

**Suggested time:** 30 minutes

1. **Using the new project panel**  
a. Video rendering and playback settings  
b. Video/audio display format settings  
c. Capture format settings  
d. Project files  
e. Scratch disks

2. **Creating a sequence**  
a. Choosing the correct preset  
b. Understanding the makeup of sequence presets  
c. Creating custom sequence settings  
d. Setting sequence start time  
e. Creating your project template

3. **Modifying an existing project’s settings**  
a. General tab  
b. Scratch disks

4. **Importing existing projects**  
a. Importing an EDL (demo only)

**Session 5: Importing media and organizing media**

**Suggested time:** 60 minutes

To better understand the project panel, go through the following elements of the software:
1. **Working with bins**
   a. Creating bins
   b. Opening bins and managing media in bins
   c. Recommended standard bins

2. **Customizing bins and clip views**
   a. Changing views and assigning labels and names

3. **Searching for clips and monitoring footage**
   a. Customizing the monitors, essential playback controls and filtering your view
   b. Using the find command
   c. Viewing thumbnails

4. **Using sub clips**
   a. Creating a sub clip
   b. When to sub clip
   c. The logic of sub clips

5. **Get organized with metadata**
   a. Viewing metadata
   b. Customizing headings in the metadata display
   c. Using the metadata panel

6. **Importing assets**
   a. When to use the import command
   b. When to use the media browser

7. **Working with the media browser**
   a. Using a tapeless workflow
   b. Supported video file types
   c. Finding assets with the media browser

8. **Importing images**
   a. Importing flattened Adobe Photoshop files
   b. Importing layered Adobe Photoshop files
   c. Image tips for Adobe Photoshop files

9. **Modifying clips**
   a. Adjusting audio channels
   b. Interpreting footage

**Session 6: Additional editing skills**

**Suggested time:** 60 minutes.
1. **Four-point editing**  
   a. Editing with four-point edits  
   b. Making a four-point edit  

2. **Retiming clips**  
   a. Changing the speed/duration of a clip  
   b. Changing speed and duration with the rate stretch tool  
   c. Changing speed and duration with time remapping  
   d. Removing the time remapping effect  

3. **Replacing clips**  
   a. Replacement techniques  
   b. Making a replace edit  
   c. Replacing footage in a project  

4. **Time-saving editing techniques**  
   a. Storyboard editing  
   b. Editing with markers  
   c. Nested sequences  
   d. Find gaps in sequences and tracks  

5. **Adding transitions**  
   a. When to use transitions  
   b. Best practices with transitions  
   c. Applying a single-sided transition  
   d. Applying a transition between two clips  

6. **Using A/B mode to fine tune a transition**  
   a. Changing parameters in the effect controls panel  

7. **Adding audio transitions**  
   a. Creating a cross fade  
   b. Applying audio transitions  

**Session 7: Timeline operations**  

**Suggested time:** 60 minutes  

1. **Program monitor controls**  
   a. Adding clips to the timeline with the program monitor  
   b. Insert editing with the program monitor  
   c. Types of markers  
   d. Automated editing to markers  
   e. Using sync locks
2. Selecting clips
   a. Selecting a clip
   b. Selecting a range of clips
   c. Selecting all the clips on a track
   d. Selecting audio or video only
   e. Splitting a clip
   f. Linking and unlinking clips
   g. Selecting audio or video only

3. Moving clips
   a. Dragging clips
   b. Rearranging clips in a sequence
   c. Using the clipboard

4. Extracting and deleting segments
   a. Lift
   b. Extract
   c. Delete and ripple delete
   d. Disabling a clip

5. Adding transitions
   a. Edit points and handles
   b. Adding video transitions
   c. Applying audio transitions

Session 8: Video trimming and the power of the trim

Suggested time: 90 minutes

1. Basic trimming
   a. Trim in source monitor
   b. Basic trim in a sequence

2. Rippling edits
   a. Rippling edits with the selection and ripple edit tools

3. Rolling edits
   a. Rolling edits with the selection tool and rolling edit tool

4. Trimming in the program monitor
   a. Launching trim mode
   b. Making ripple trims using the trim mode
   c. Making rolling trims using the trim mode

f. Using track locks
5. Making split edits

6. Slipping edits
   a. Slipping an edit in the source monitor
   b. Slipping on a sequence

7. Sliding edits
   a. Using the slide tool
   b. Sliding with the keyboard

8. Maintaining (and breaking) sync
   a. Linking and unlinking audio and video
   b. Moving and slipping clips into sync

Session 9: Audio mixing and repair, sound fix and mix

Suggested time: 75 minutes

1. Setting up the interface to work with audio
   a. The audio workspace
   b. Master track output
   c. Monitoring audio levels with the audio mixer
   d. Sound inputs, recording sound, voiceover recording

2. Adjusting audio levels on a sequence
   a. Showing audio waveforms
   b. Adjusting overall clip levels
   c. Key framing clip volume changes
   d. Adjusting audio in the effect controls panel
   e. Adjusting audio gain
   f. Smoothing volume between clip key frames
   g. Track key frames

3. Using the audio mixer
   a. Overview of the audio mixer
   b. Understanding automation modes
   c. Sub mixes and bussing

4. Routing with adaptive tracks

5. Using audio effects
   a. Two ways of adding audio effects, bass delay, pitch, etc.

Session 10: Color correction
Suggested time: 60 minutes.

1. **Using video scopes**
   a. Accessing scopes and the color correction workspace
   b. Scope essentials
   c. More about the reference monitor

2. **Primary color corrections**
   a. Exposure problems
   b. Adobe Premiere Pro effects to fix exposure
   c. Fixing underexposed video footage
   d. Fixing overexposed footage
   e. Fixing color casts
   f. Adobe Premiere Pro effects to fix color
   g. Fixing exposure contrast first
   h. Tackling color

3. **Secondary color corrections (time permitting)**
   a. Adobe Premiere Pro effects for secondary color corrections
   b. Using a secondary correction to fix skin tone

4. **Applying effects in Adobe Premiere Pro**
   a. Fixed effects
   b. The effects browser
   c. Applying effects
   d. Using adjustment layers
   e. Using effects presets
   f. Saving effect presets
   g. Removing effects

5. **Understanding key frames**
   a. Adding key frames
   b. Key frame interpolation

**Session 11: Creating titles, use of graphics**

Suggested time: 60 minutes

1. **Video typography essentials**
   a. Suggest students read on their own after class
   b. Benefits of reading include better understanding of best use of tools and options

2. **Using Adobe Premiere Pro’s titler**
   a. Creating and editing titles
b. Entering text
c. Formatting text
d. Stylizing a title
e. Creating a template

Session 12: Publishing your video

Suggested time: 60 minutes

1. Exporting a digital master
   a. Matching sequence settings
   b. Choosing another codec
   c. Choosing a file format for export
   d. Configuring the export

2. Supported file types
   a. Footage files
   b. Graphics files
   c. Audio files

3. Modifying clips
   a. Adjusting audio channels
   b. Interpreting footage
   c. Modifying timecode
   d. Overview of the export settings dialog
   e. Additional options

4. Creating Flash content
   a. Choosing between FLV and F4V
   b. Using FLV and F4V presets

5. Creating H.264 content for devices and Web delivery, MP4 settings
   a. Exporting files, print to tape, to DVD

6. Publishing to DVD and Blu-ray, recording to tape (brief overview as time permits)
   a. Preparing a project for tape output
   b. Preparing a tape for output
   c. Recording to a DV or HDV video recorder
   d. Using MPEG-2 presets for DVD
   e. Choosing between MPEG-2 and H.264 for Blu-ray

7. Exporting additional file types
**Activity one**

Produce a video story using your Adobe Premiere editing skills and techniques learned. Using the material filmed in the previous lessons, edit your footage to a three-minute-long video story. The story should include:

- A/B roll videos
- Sound bites from the interviews
- The interviewees’ titles
- Graphics and still images

When finished, export the video story into two different formats one for publishing online (YouTube) and the other to be used in a TV station or burned onto a DVD. To learn more about using Adobe Premiere, use these online resources:

Lesson 12: Photojournalism

Objectives:
- Trainees will become familiar with the history, tools and developments in photojournalism.
- Trainees will be able to set their photo camera to suitable settings.
- Trainees will learn and practice certain photo compositions.
- Trainees will learn the difference between artistic photos and journalism photos.
- Trainees will learn who may be considered a photojournalist, as well as the ethics of photojournalism.
- Trainees will learn how to write captions.

Materials: PowerPoint presentations, flipcharts, video projector, photo cameras, mobile phones, laptops, connectivity, how-to videos (about photos and composition, exposure and use of camera.)

Session 1: Introduction to the history of photography and the digital camera

Suggested time: 20 minutes

The trainer should explain:
- The history of photojournalism
- The development of the camera
- The digital camera and its basic settings, including the default settings and the use of each setting, and how to use the same settings in the mobile phone’s camera.

Activity one
Practice your camera’s basic settings and the settings on your mobile phone’s camera

Suggested time: 30 minutes

Each trainee will use his camera, to shoot one photo on each of the default settings of the camera, read the camera’s menu, change the settings and take another photo of the same position with the different settings. Each trainee will show his photos and explain the changes he made on the setting to improve the photo. A discussion of each photo will follow the trainees’ presentations.

Session 2: Photo-making elements, compositions and tips

Suggested time: 60 minutes

During the presentation, the trainer should demonstrate each type of composition listed here:

- Rule of thirds and golden rule
- Simplicity
- Exposure
- Lines – horizontal, vertical, diagonal
Activity 2

Suggested time: 75 minutes

After the presentation each trainee will practice taking photos with a camera and with a mobile phone to compare the differences in quality. Think of places and objects of which you can take photos, and how you can compose a story through photographs demonstrating a relationship between those images. Trainees will be asked to spend 30 minutes outside photographing. Each should come back with at least 10 photos which meet the photo techniques described above. Each trainee will present his photos and explain why they think it makes a good photo story, its theme and subject, followed by discussion.
Lesson 13: Telling stories with photos, photo slide shows and captions

Session 1: Telling stories with photos

Objectives:
• Trainees will learn the components of a photo story:

Suggested time: 60 minutes

Materials: PowerPoint presentations, flipcharts, video projector, photo cameras, mobile phones, laptops, connectivity

Session 2: The basics of photojournalism

• Every photo story begins with an idea. Identify the main subject and how you will illustrate the idea in photographs.
• Take photos with objects and theme that match what you are trying to convey.
• Captions should enhance the information you already gather by just looking at a photo.
• Basic photo editing and composition can help to shape your story.
• Publishing the right photographs can help to better tell your story.
• Review and practice the steps and tools used by photojournalists to produce and publish a photo story.
• Trainees will differentiate between the different legalities and ethics of photo journalism

Activity 1: Practicing photojournalism, creating and publishing photo stories

The photo story should have a human component and should consider the ethics of photojournalism. In this training, trainees should start the work as a team then work as individuals.

• The team will think of a photo story to be shot by everyone in the group.
• Each trainee will photograph at least 30 photos to cover the story.
• Each one will create their own story using at least 21 photos.
• Each will write the captions for the series of photos he chooses.
• Create a photo slide show using software of their choice.
• Each member of the group will present his story and compare with the stories of those in their group, taking notice of different points of view, different captions and other points of divergence.
• Trainees should publish their stories on their blogs, Facebook pages and anywhere else they see fit. They should discuss with the group where and how they would publish their stories.
Lesson 14: Sound stories

Sound slides, photo stories with narration (voice over), mixing sound and music

Objective:
- In this lesson trainees will learn basic sound recording, voiceover recording, editing sound bites with basic and advanced sound editing software, creating sound stories and photo slideshows.

Material: PowerPoint presentations, flipcharts, video projector, photo cameras, mobile phones, laptops, connectivity, sound editing software like Audiocity, Adobe Audition or others

Session 1: Sound editing software, basic and advanced sound editing systems

Suggested time: 30 minutes

The trainer should explain:
- The different types of sound systems, including basic sound recording tools and techniques outside and inside a studio, sound formats and sound file formats, and microphones
- The basic sound editing software, such as Audio City, which is free.
- Advanced editing software and some hardware requirements and components.
- The Adobe Audition software for those looking for higher end software.
- Using sound recorders and mobile phones for recording sound bites and interviews for photo stories.

Activity 1: Practical exercise in basic sound recording and editing

Suggested time: 60 minutes

- Trainees will use their mobile phones to record sound bites and voiceovers, with attention paid to sound levels, noise, channels, and external and internal microphone use.
- Trainees will use basic sound editing software (like Audio City) to edit the sound bites and create a sound story by recording themselves doing the voiceover.

Session 2: Editing sound with Adobe Audition

This session will be implemented in five practical steps.

Step 1: The following are some helpful commands for working with Adobe Audition: Using the waveform view in Adobe Audition

Opening a new file:
- File/New and select Sample Rate of 44100, set channels to mono and resolution to 16-bit
Saving a file
- File/Save As/Windows PCM (*.wav) if you want to edit this segment.
- File/Save As/mp3PRO™ (FHG) (*.mp3) once you have finished editing and need to compress the size of the file for use with MP# players, etc.

Normalize amplitude for voice:
- Effects/Amplitude/Normalize/Normalize to 98.86%
- Effects/Filters/Graphic Equalizer/Reset to Zero then drop the first four bands (below 80Hz) to –18

Amplitude:
- Effects/Amplitude/Amplify/3dB Boost or 10dB Boost

Deleting a piece of the audio file:
- Select the audio with the left button on the mouse (click and drag to highlight) and press delete.

Generating silence (adding a pause)
- Generate/Silence and specify duration, e.g. type 1, in the dialogue box to insert a one-second segment of silence.

Copying a piece of audio to another file
- Select the piece of audio with the left-button on the mouse (click and drag to highlight), then Edit/Copy to new.
- Then switch to the new segment and save it

Cutting and pasting audio from one location to another in the audio track
- Select the piece of audio with the left-button of the mouse then Edit/Cut (or Ctrl-X)
- Then locate the point where you want to insert it and Edit/Paste

Slow/Speed Up Tempo
- Effects/Time Pitch/Stretch/Slow Down or Speed Up or other Presets

Telephone Acoustics
- Effects/Filters/FFT Filter and scroll down to Telephone-Receiver

Explore other effects:
- Effects/Filters/FFT Filter and Effects/Delay Effects

Using the Multitrack View in Adobe Audition, the following are helpful buttons and short cuts to remember:
Adobe Audition has two views: **Waveform Edit View** and **Multitrack View**. You can switch back and forth between these views in several ways: From the View menu, using the Multitrack button or the Waveform Edit button on the tool bar, and by pressing **F12**.

In the Multitrack View you use the File menu to create new, open and save session files **SES**.

In order to add an existing sound file: **Insert/Wave from File…**

You can move the Wave/MP3 file to different locations or even to different tracks using the right-button on the mouse. You can add as many files as you wish. To delete a file, select it and press the delete key on the keyboard.

You can view more tracks by contracting the view using the magnifying glass button.

You can use the RSM buttons on the controls for the track: **R** to record, **S** for Solo, and **M** for Mute. You can increase or decrease the volume by right-clicking on the button.

You can record into a given track as you listen but realize you are recording the sounds you hear in the background, as well.

To save your session: **File/Save Session As…** to give the file a new name or **File/Save Session** to save again.

To create a Wave or MP3 file: **File/Save Mixdown As…** It will probably request that you save the session and individual files that have not been saved. You can choose to save the file as **Windows PCM (*.wav)** or **mp3PRO™ (FhG) (.mp3)**.

You can also dub audio for a video using Adobe Audition.

1. Make sure you are in Multitrack View. From the menu, **View/Multitrack View** or **F12**.
2. Insert your video clip. **Insert/Video from file…** The first track should contain the video, the second track the audio from the video, and a video window should appear.
3. Press the green **M** button on the controls for the second track containing the audio from the video. This will mute it.
4. Press the red **R** button on the third empty track. Here you will record a new audio track.
5. Press the record button to create a new audio track as you watch the video. Press the black square button to finish.
7. Save your new video clip: **File/Save Mixdown to Video As…**

To connect a microphone to Windows to record voice:

- You may have a standard microphone or a USB microphone. If you have a **standard microphone**, it would be plugged into the pink jack of the sound card located at the back of the computer. If you have a **USB microphone**, it would be plugged into any of a number of USB ports connected to the computer. A USB microphone provides far better quality for recording.

- There are several ways to set the microphone as a recording device:
  1. **Start/Programs/Accessories/Entertainment/Volume Control** (or you can double-click on the speaker icon in the System Tray in the bottom right-hand corner of the Windows desktop next to the Task Bar).
  2. Go to **Options/Properties**. Bullet **Recording** and make sure Microphone is checked in the window: Show the following volume controls. Click OK.
• You can also connect to the microphone from Adobe Audition:
  1. Start Adobe Audition and switch to **View/Edit WaveForm View**.
  2. Go to **Options/Windows Recording Mixer...** This will open the Windows Recording Mixer. As above, click on **Options/Properties**, Bullet Recording and make sure Microphone is checked in the window. Show the following volume controls. Click OK.

• If you have a **USB microphone**, you will also have to make sure the USB Audio Device is selected for Edit View (EV) in the Adobe Audition **Device Ordering Preferences/Recording Devices**.
  1. Start Adobe Audition and switch to **View/Edit WaveForm View**.
  2. Go to **Options/Device Order...** This will open the **Device Ordering Preferences**. Click on the Recording Devices tab. Select USB Audio Devices and press the **Use in EV** button. An (EV) will appear after this device.

If the USB Device is not listed to the right in the **Multitrack Device Preference Order** window, you may have to select it on the left in the **Unused Record Devices** window and press the **Use>>** button.

![Device Ordering Preference](image)

Instructions for connecting through Windows to record from the microphone:
• Switching to Wave input through Windows also involves turning off the microphone. If you have a USB microphone, the process requires two steps.
  1. As above, open **Start/Programs/Accessories/Entertainment/Volume Control**. In **Options/Properties**, the Mixer device should be the particular sound card, not the USB Audio Device.

![Volume Control](image)

  2. Bullet Recording and make sure **Wave Out Mix** or **WaveOut/MP3** is checked in the window: Show the following volume controls. Click OK. Then, select **Wave Out Mix** or **WaveOut/MP3**. The microphone will automatically be unselected. Depending on your sound card, Wave/WaveOut has different names. It might also be called “What U Hear.” This input is specific to the SoundBlaster sound card.

• You can also switch to Wave input from Adobe Audition
  1. Start Adobe Audition and switch to **View/Edit WaveForm View**.
2. Go to **Options/Windows Recording Mixer**... This will open the Windows Recording Mixer. As above, click on **Options/Properties**. Bullet Recording and make sure **Wave out Mix or WaveOut/MP3** is checked in the window: Show the following volume controls. Click OK.

- If you have a USB microphone, you will also have to make sure the USB Audio Device is selected for Edit View (**EV**) in the Adobe Audition **Device Ordering Preferences/Recording Devices**.

1. Start Adobe Audition and switch to **View/Edit WaveForm View**.
2. Go to **Options/Device Order**... This will open the **Device Ordering Preferences**. Click on the Recording Devices tab. Select your particular sound card, e.g., SoundMAX Digital Audio, and press the **Use in EV** button. An (**EV**) will appear after this device. If the sound card is not listed to the right in the Multitrack Device Preference Order window, you may have to select it on the left in the **Unused Record Devices** window and press the **Use>>** button.

- Once you select the recording device to either the microphone or Wave input, you will have to set it back again following the appropriate steps outlined above.

The remaining steps each needs at least a 30-minute practical session.

**Step 2:** Importing sounds, sound files and sound voiceover recording  
**Step 3:** Cut and mix, fade in and out and sound transitions, audio level control and pan  
**Step 4:** Sound filters and how to apply them  
**Step 5:** Exporting and saving a sound story.

**Activity 2: Recording voiceover and mixing sound in Adobe Audition**

**Suggested time:** 90 minutes

Each trainee will write his voiceover or narration for their own story. Use Adobe Audition to record voiceover, with the following steps:

1. Make sure your microphone(s) are plugged into the mixer and are on.
2. Make sure the mixer is hooked up to your computer ("Main Out" of the mixer into the blue input on the back of your computer.)
3. On the mixer, make sure the fader knobs are up on the channels that your mikes are plugged into. Turn all the other faders all the way down.
4. Make sure the black pan knob and the blue EQ knobs are at 12 o’clock.
5. Make and name a folder inside of your class folder on your computer (A, B, C, etc.)
6. Click on the Adobe Audition icon on your desktop.
7. Press the red record button to record a new clip.
8. Choose 44100 as your sample rate.
9. Test the mike levels by speaking into them. The levels on the VU meter should peak at -5 to -3. If your levels reach the clipping point, turn the fader down a little on your mixer.
10. Turn your speakers off while recording; otherwise you will record reverb or feedback.
11. One or both group members should listen with headphones while you are recording.
   Listen for humming, popping, breathing sounds and distortion.
12. Once you have the levels for both microphones set, you’re ready to record.
13. Press the space bar to stop recording. Then press the delete key on your keyboard.
14. Record your dialogue; you do NOT need to record the whole thing in one take.
15. If you are unhappy with your recording, press Control-A and delete.
16. If you are happy with the recording, save it (Control-S). Save it as your group members’ names.
17. To start a new recording, press Control-N. Pressing the record button will overwrite your previous recording!
18. To listen to your recording, press the space bar.
19. Import the other sound bites.
20. Open a multitrack window.
21. Place the sound bites in track one.
22. Place the voice over parts in the second track.
23. Import music. Add music to the third track, apply fade in and fadeout and mix the music with other tracks. Make the music track level lower when the sound bites or voiceover starts.
24. Clean, cut, and apply any needed sound filters.
25. Mix the sound with other sound bites according to the story.
26. Once you have recorded your dialogue to your satisfaction, export it for use on other software or for publishing online.

Session 3: Photo slides, sound shows and photo editing

Suggested time: 60 minutes

In this presentation, the trainer will explain photo stories with sound narration production and publishing, software used for the production of photo stories as a form of digital story telling. Trainees will learn, understand, and practice:
• The process, techniques and components of Soundslide photo stories.
• The software used for the production of sound stories.
• The basics of photo editing, cropping and fixing using Microsoft Paint, Photoshop, and online photo editors.
• Exporting and publishing sound slides online.

The trainer should first explain the Soundslides software and Microsoft Photostory software as examples of available software and remind them that they can also use Moviemaker, Adobe Premiere, or Adobe Audition for recording and editing sound or voiceover for a slide show. At the end of presentation, show some examples of published sound slide shows, followed by discussion.

Activity 3: Producing digital stories using photos and sound slides

Suggested time: 60 minutes

Trainees will develop a photo story.
1. They should first find an idea, then determine the primary and secondary objects in the story.
2. Shoot at least 60 photos of a newsworthy subject of your choosing.
3. Use a camera or phone of your choice, but the quality of the final image is important.
4. Import, crop and tone your photos using, MS Paint, Photo Editor, Photostory, Photoshop or an equivalent mobile app.

5. Load the full shoot into a folder in your personal Dropbox, Google drive or directly to your computer and share with the instructor for their feedback.

6. Use any of the previously discussed software, like Photostory, Soundslides or Moviemaker to produce a one-and-a-half minute audio slideshow of about 20 images, by following these steps:
   a. Import photos.
   b. Decide which you will use in the slide show.
   c. Arrange them and set the length of appearance time for each photo.
   d. Set the transitions between photos.
   e. Write captions on each story.
   f. Record your voiceover.
   g. Check your story, timing, captions and harmony of photos with sound.
   h. Export your story to the format you will use to publish it online.

7. Create a new story page on your blogger page (or other platform for publication) write some captions, or a brief text story about the photos and embed your slideshow within the post.

8. Post the final product on at least three of the following platforms: Facebook, Google+, Picasa, Flickr, SoundSlides, Blogger, YouTube, etc.

Trainees may sign up for accounts on the following sites, and use the tools for production or publishing of photo stories and sound slide shows:

- **500px**: A relatively new, social/sharing type site that leans toward fine art/professional photo use. High quality display. No embed function.
- **Flickr**: The largest of the social photo posting services. Integrated with Yahoo.
- **Picasa**: A gallery and editing suite integrated with Google – similar to Flickr. Great Google+ interplay potential.
- **Soundslides**: Something of a professional standard. Somewhat easy to use, but better suited to audio slideshows. Difficult to embed. Not mobile friendly.
- **Vuvox**: An interesting montage/multimedia platform that could work for a slideshow.
- **Vimeo and YouTube**: Though these are video platforms, you can also load your images into a video editing app and upload to either platform. Not optimized for photos – and better geared toward audio slideshows, but usable.
Lesson 15: Crowdsourcing, information gathering

Session 1: What is crowdsourcing? What tools can be used for crowdsourcing? What are the ethical considerations of crowdsourcing?

Suggested time: 60 minutes

Materials: PowerPoint presentations, flipcharts, video projector, mobile phones, laptops, Internet connection

Trainees will learn and understand the different sources of online information that can be used in crowdsourcing. Some questions for discussion with the group:

1. What is crowdsourcing? Why would we need the crowd (followers, online friends, readers in our journalism work) and how can we build a database and use information from your audience in story development?
2. Ethics of crowdsourcing.
3. Different tools, RSS, news alerts, social networks used in crowdsourcing.
4. The use of social networks in crowdsourcing, like Facebook and Twitter. The presentation should be interactive and include examples from your media market, and trainees should provide their own examples.

Activity 1: Work groups

Suggested time: 15 minutes

Before the development of a story, define the following:
- Who are your objects?
- What are the sources of information you will use to get the information?
- Do you have all the information about the story and the objects?
- Who can help you get further information?
- And who may have better access to the sources?

Session 2: Credibility of online information

Suggested time: 45 minutes

In the era of digital journalism a lot of information distributed online comes from citizen journalists or others who may have an agenda behind circulating inaccurate information, images and video. Consequently:

1. Before publishing, confirm the credibility of the information.
2. Understand and know the tools and techniques used to clarify and check the credibility of information.
3. Trainees should understand the impact of faking images.
Activity 2: Online tools used for checking image credibility

Suggested time: 75 minutes

After explaining each of the major tools for verifying image credibility, trainees will practice all of them, signing up for accounts where it is required.

- Google images
- Tineye
- Photocheck

Trainees will practice using the above tools by finding an online image and:

1. Saving the image to the computer.
2. Checking the image using the tools, using its URL.
3. Finding any changes made to the image and how the image has been used differently.

Activity 3: Use of SEO in finding and verifying information.

Suggested time: 60 min

The trainees will learn how to find certain information published online, how to utilize certain file types, content, fields, topics, etc, and how to use different search engines, including conducting an advanced search on Google. This is an interactive session. The trainer should explain the techniques and tools, and trainees will implement those skills by finding information related to a story they intend to develop.

Activity 4: News alerts and RSS:

Suggested time: 30 min

Trainees will be asked to utilize the tools they’ve learned in order to verify images. They will use RSS feeds to follow credible news sources and build their feeds into a free app like Feedly.

1. Find out if news sources you trust have RSS feeds.
2. Create an RSS feed list from different sources using Feedly.
3. Use Google news alerts to get news summaries and news sent directly to your email.
4. Find mobile applications using RSS feeds and utilize those.
Lesson 16: Digital Journalism Ethics

Plagiarism

• Don’t steal the work of others
• Using someone’s work without permission is called “plagiarism”
• Plagiarism is not limited to excerpts, but also includes photographs, images, videos, and longer text blocks
• If you use content from another website, be sure to link to it
• In case the link could change, reference the name of the publication, the author, and the date it was published
• When in doubt, include citations and links of your sources

Disclose, disclose, disclose

• Tell your readers how you obtained your information and what motivated your to report it
• Clearly state if you have personal or professional relationships with the people or organizations that you write about. Readers deserve to know what might influence your writing
• Do not hide who your employer or your sources of revenues from your readers
• If your sites publishes advertisements, clearly indicate that you derive revenue from the advertised links on your site

Ethics of publishing photos and graphics

• Although digital journalism facilitates obtaining, storing, and publishing photographs, there are also several methods for manipulating photos by changing their content and context
• You should not alter images without legitimate reasons and including a clear indication of the change
• Altering images without references affects their credibility

Don’t accept gifts or money in return for coverage

• A common way for journalists to avoid conflicts of interest is by refraining to accept gifts or money
• Authors who accept gifts or money from the sources they cover put themselves at risk of accusations that they are advertising, or at the very least are influenced by these payments
• If you write about your employer, clearly indicate that you receive money from them
• Most news organizations permit their writers to have free access to events to write about them, but typically prohibit certain extras such as free hotel rooms
• Writers may also receive free books, for instance, to be reviewed. High valued materials, however, should be returned after they have been reviewed
**General Principles**

- Search for the facts
- Do justice in your coverage, analysis, and interpretation of events
- Provide links to information related to your story
- Don’t be misleading
- Clearly state the editorial policy of the site
- Confirm the quality and credibility of the links you use
Lesson 17: Digital Security for Journalists.

Objectives:

- Trainees will become familiar with the personal security considerations journalists should take before, during, and after their work in the field.
- Trainees will be able to keep, store, and communicate their information in a secure way and keep a backup of their information.
- Trainees will learn the basic measures, precautions, and tasks that should be taken to guarantee equipment security.
- Trainees will learn the basics of information resources security (people we meet, interview, provide us with information) and the people databases that are available.

Session 1: introduction to information security and journalism.

Material: PowerPoint presentations, flipcharts, video projector, trainees’ mobile phones and laptops, internet connectivity.

Suggested time: 30 minutes

Activity 1

What is digital security: trainees will discuss what it means, how we can use it, in which fields it is applicable, and practical aspects that apply to daily journalism work.

- Trainees should give examples from their previous experience, along with any procedures and measures they use.

Presentation: definition, explanation, and tips on general digital security, and different precautions and measures that should be taken by digital journalists. The trainer should draw from the following sources and text to customize their presentation.


What is information security in general?

Presentation: definition, explanation, and tips on information security, and the different threats and precautions that should be taken. The trainer should draw from the following source and text to customize their presentation.

- [http://www.wisegeek.org/what-is-information-security.htm](http://www.wisegeek.org/what-is-information-security.htm)

Session 2: Information security for journalists
Material: PowerPoint presentation: intro to information security, computer sets, trainees’ laptops and mobile phones, video projector.

Objectives:

- Trainees will learn what types of threats digital journalist can face in terms of information security, the risks inherent in using computers and how to avoid the main risks.
- Trainees will understand the risks and threats in online digital journalism work.
- Trainees will learn about security systems – on computers: firewall, antivirus, passwords, privacy, etc…
- Trainees will learn about security systems - on networks: encryption of information, authentication, and other safety measures.

Question: What is information security? How can we guarantee the security of our information on computers, online, and on mobile phones/tablets?

- Understanding the Threat
- Protecting Communications
- Defending Your Data
- Protecting External Data
- Choosing a Strong Password

Presentation: A presentation on information security, international context, and threats. The trainer should customize their presentation using the following sources as guides/references:

- http://www.cpj.org/reports/2012/04/information-security.php

Good resources to use (secure browsers and proxies for publishing and gathering data, as well as security sites):

- http://psiphon.ca
- https://www.torproject.org
- https://www.your-freedom.net
- http://ultrasurf.us
- https://securityinabox.org

Session 3
Practical: Each trainee should check their passwords, security measures, and antivirus software according to what was discussed, and find out what the greatest possible threats are according to settings, systems and procedures they are currently using.

Discussion

Session 4: Mobile Security

Material: PowerPoint presentations, flipcharts, video projector, trainees’ laptops and mobile phones, internet connectivity, videos.

Discussion: what is mobile security? In group discussion, cover the following topics, with trainees giving examples from their own experience

- The threats you may face using mobile phones for digital journalism
- How to guarantee the safety of data
- Backing up data
- Passwords
- Antivirus
- Using different numbers, or memory cards
- Removing batteries

It is important to note that many of the techniques discussed in the previous section apply also to mobile security.

Further reading: “Mobile in a box” on https://securityinabox.org

Discussion: Physical security of digital journalists, the security measures to guarantee the safety of yourself and your sources of information when on the move.

Session 5

Group work: Each group should develop a list of security measures and suggestions on how to guarantee the security of yourself and your information in the course of production of a digital story, interview or covering a violent event.
Lesson 18: Cloud Computing and Storage

Material: PowerPoint presentations, flipcharts, video projector, trainees’ laptops and mobile phones, internet connectivity, Videos, how to videos

Session 1

Objectives:

• Trainees will be able to explain the characteristics of cloud computing.
• Trainees will be able to describe and use cloud services.
• Trainees will be able to describe their own cloud computing needs.
• Trainees will discuss the challenges of cloud computing for journalism organizations, institutes, outlets and individuals.

What is cloud computing? According to Wikipedia, cloud computing is the delivery of computing and storage capacity as a service to a heterogeneous community of end-recipients. So what does that mean? Basically it is a way to store photos, documents, videos or any other kind of digital information in a far off location that can be accessed through the Internet. This allows for much more freedom. Users can access their information from anywhere there is Internet access. Google has been the go-to place for searching for content online; however, many people outside of education are unaware of all of its other useful programs. Google Docs is a great example of cloud computing. Help your community members learn more about Google Docs by using the many features available.

Discussion: discuss the following topics as they relate to the trainees experiences.

• Definition of cloud computing
• What are the main components of cloud computing? The equipment, computers specs, internet connectivity, and networks structure?
• Who are the main users and what are the benefits of cloud computing? What are the threats?
• How can journalists and media benefit from cloud computing and cloud storage?
• Free, open sources of cloud computing and alternative services; software that exists for the use of digital journalists
  o Google drive, Skydrive, Dropbox, etc…

Session 2

Practical: show trainees the basic cloud computing services available, and introduce them to how to use them. Focus on Google Docs and Google Drive, though there are others:
• Microsoft Cloud Computing
• Apple Cloud
• Dropbox
• Evernote
• VoiceThread
• Google Docs
• 4shared.com
• Megashare.com
Lesson 19: Introduction to Infographics

Objectives:

- Trainees will learn what infographics are, as well as the history of infographics.
- Trainees will learn about where infographics are used.
- Trainees will understand the difference between infographics and data visualization.
- Trainees will understand how to use infographics in digital stories.
- Trainees will learn about different common infographics styles.

Materials: PowerPoint presentations, flipcharts, video projector, trainees’ laptops and mobile phones, internet connectivity, how to videos (mostly available on YouTube)

Session 1

Introduction to Infographics

Infographics are a popular way to present data by distilling the words, data points, key concepts and illustrations that might be present in a report and creating a visual representation of the material. Creating and presenting visually attractive data is an art form. Infographics, also known as information graphics, are visual representations of data, knowledge or information using clever composition and visual flow in a clear, understandable, visually stimulating way. Some common software that can be used to create infographics are: Adobe Illustrator, Adobe Photoshop, Microsoft PowerPoint, though there are many other professional applications.

Discussion: How to find a story that has different data components, assess that data, define your message and then plan and execute a well designed infographics?

Session 2

A presentation on infographics and their relationships to digital stories. The presentation should cover the basics of infographic creation and their role in digital story development.

Tips for Creating a Great Infographics:

1. **What is my story**, my idea? Can I represent it by graphics? Will it be more clear and simplified?
2. **Keep it simple.**
3. **Check your facts.** Incorrect info. Decreases your credibility. Always fact-check and proofread.
4. **Design counts.** Strong headlines, choice of type, effective layout and use of white space are all essential.
5. **Color works.** Use color for maximum impact, but don't use it just to be colorful.
6. **Numbers must add up.** Check them carefully.
7. **Enhance story.** Make sure the visual adds to your story.
8. **Keep text brief.** *The best visual presentations use only essential text.*
9. **Don't overdo it.**
10. **Credit where credit is due.** Respect copyright and always credit your sources. It's the right thing to do.

**Answer these questions:**
1. What will my Infographics be about? What is the story?
2. What symbols and pictures will I use?
3. What type/style of Infographics will I create?
4. How will I make it interesting?
5. What will my scope be?
6. What will my color scheme be?
7. Which sources will I use?
8. Who is my target audience? Kids, adults, other experts in the area?

**Session 3**

**Practical:** Divide the trainees into groups and have each group do the following:

1. Find a story
2. Clarify and develop the data to be represented by an infographic
3. Use flip charts to plan the infographic, design the outline, decide colors
4. Draw a sketch of the infographic with text to be included.
5. Draw the main outline of the infographic and show the flow of information in the story.

**Session 4**

**Practical:** Each trainee should find a story that can be represented or augmented by an infographics. Trainees should keep the following points in mind during the process.

**Defining your Goals**
- Who is my audience?
- Assessing the data you have
- Finding the story within the data

**Determining the content**
- What is the core message the infographic must communicate?
- Choosing data to communicate your message(s)?
- Using statistics and facts
- Less text is more

**Designing your graphic**
- Simplicity and clarity
Session 5

Materials: PowerPoint presentations, flipcharts, video projector, trainees’ laptops and mobile phones, internet connectivity, how to videos (mostly available on YouTube)

Presentations: On the following (in parallel with practical skills work):

1- The basics of PowerPoint and how to use it for creating and development of Infographics.
2- The basics of Photoshop.
3- Adobe illustrator (needs a special course)

In the presentations, cover the following at a minimum:

- About the templates
- Creating a color scheme
- Using fonts for design
- Design icons and shapes
- Working with a theme
- Conclusion & resources

And six steps to create an infographic.

1- Become familiar with the ways to visualize information.
2- After research and data collection, refine it and define the best way to represent it.
3- Hand-sketch a draft.
4- Gather images and cite sources.
5- Pick the template or create and develop your own scheme, theme, colors and fonts.
6- Create Infographics and cite sources. Using either computer based software or one of the online tools available for creating Infographics and also it helps in publishing, which we will give some examples and we will practice in the next session.

Below are some guidelines trainees may find helpful during each of the presentations:

Table 1
### Basic Guidelines for Infographics

<table>
<thead>
<tr>
<th>Topic</th>
<th></th>
</tr>
</thead>
</table>
| **Purpose** | Serve a clear purpose (description, exploration or tabulation)  
Tell a story |
| **Audience** | Know the background knowledge of your audience. |
| **Design** | The design should be simple to encourage understanding. |
| **Format** | Be consistent regarding style and appearance. |
| **Graphics** | Each graphic, like a paragraph should communicate one key idea.  
Avoid content-free decoration |
| **Readability** | Text information should provide a single message at a time. |
| **Aesthetic & Technique** | Use words, numbers and drawings to complement one another.  
Reflect a balance, proportion, and sense of scale |
| **Clutter** | Avoid clutter and confusing designs |
| **Data** | Show the data.  
Avoid distorting the data |

### Table 2

*Infographic – Design and Development Guidelines*

<table>
<thead>
<tr>
<th>Topic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Message</strong></td>
<td>List the key message(s) you wish to communicate.</td>
</tr>
<tr>
<td><strong>Purpose</strong></td>
<td>Indicate the purpose of the content – description, tabulation, exploration,</td>
</tr>
<tr>
<td><strong>Audience</strong></td>
<td>Identify the knowledge and skills the students possess</td>
</tr>
</tbody>
</table>
| **Data** | Collect the data to be visualized.  
Identify the key points in the data. |
Separate the content into main ideas and supporting details.

<table>
<thead>
<tr>
<th>Rough Sketch</th>
<th>Draw a simple, small-scale pencil drawing of the information graphic. This will probably require several revisions.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Layout</td>
<td>Design a layout consistent with the data collected.</td>
</tr>
<tr>
<td></td>
<td>Create rough sketches of the content layout</td>
</tr>
<tr>
<td></td>
<td>Verify that the layout appearance matches the purpose and tone of the presentation.</td>
</tr>
<tr>
<td>Collect Materials</td>
<td>Search for fair use content from Internet or create original content</td>
</tr>
<tr>
<td></td>
<td>Store and backup collected materials</td>
</tr>
<tr>
<td>Assemble Graphic</td>
<td>Using the rough sketches and design layout, assemble the infographic.</td>
</tr>
<tr>
<td></td>
<td>Multiple revisions should be expected.</td>
</tr>
<tr>
<td></td>
<td>Where possible share the example with a colleague for feedback.</td>
</tr>
<tr>
<td></td>
<td>Revise the draft infographic – the more iterations you make the better the final product will be.</td>
</tr>
<tr>
<td></td>
<td>Check to verify all topics from the general guidelines have been met.</td>
</tr>
<tr>
<td></td>
<td>Revise, as needed.</td>
</tr>
<tr>
<td>Sources</td>
<td>List the sources (URLs, books, etc) used in the story.</td>
</tr>
</tbody>
</table>

**Session 6**

**Presentation:** the most used and most effective online tools for infographics. The following are some examples that can be used to cover this area.

1. **Easel.ly**
   - A free, web-based tool with drag and drop interface. Includes “themes” to get you started.
2. **Infogr.am**
   - Create free interactive charts or infographics you can embed in a blog, wiki, or web site or share by URL. Sign in using Twitter or Facebook ID is required.
3. **Piktochart**
   - A simple infographic creation tool released from beta in spring, 2012. Sign up required to use the free (or paid) version.
4- **Venngage**
A free, web-based tool to create professional looking infographics using their templates.

5- **ChartsBin** – An online tool to create your own interactive map instantly with no installation or coding needed, and you can embed the map in your own website or blog easily too.

6- **Tableau Public** – A free application for your Windows computer that brings data to life. You can create and share interactive charts and graphs, stunning maps, live dashboards and fun applications in minutes. Anyone can do it, it’s that easy.

7- **Creately** – Want to create beautiful diagrams in no time? Creately may be a good choice to use as it can be used across all sectors by individuals, corporate teams, developers, software architects, students and teachers alike for diagramming purposes.

8- **Gliffy** – Gliffy helps to easily create professional-quality flowcharts, diagrams, floor plans, technical drawings, and more. You can easily drag-and-drop your way through the makings of an infographic using the many shapes from an extensive library.

9- **SIMILE Widgets** – SIMILE is a free and open-source data visualization Web widget.

10- **Tagxedo** – Tagxedo turns words – famous speeches, news articles, slogans, themes, even your love letters – into a visually stunning word cloud. Every word is individually sized to highlight the frequencies of occurrence within the body of text.

11- **Wordle** – Wordle is a simple web app for generating “word clouds” from the text you provide. While the clouds give greater prominence to words that appear more frequently in the source text, you can also tweak your clouds with different fonts, layouts, and color schemes.

**Session 7**

**Working groups:**

1- Each trainee will create an account in one of the online tools he/she feels is most user-friendly, and practice for 30 minutes.

2- Group work – using the infographics that were planned and sketched out during the previous work, try to use one of the online tools to finish development of that infographics, thinking about the best template, color scheme, font, etc…
Lesson 20: Mobile Journalism (MOJO)

Objectives:

- Trainees will learn how to gather information through news alerts, rss feeds, sms, phone calls, etc…
- Trainees will learn about the use of mobile platforms for the development of stories.
- Trainees will learn the basics of mobile reporting, including interviews, reports, production, photos, video filming, audio recording, photo editing, audio editing, video editing, taking notes, etc…
- Trainees will be able to share information using their smartphones.
- Trainees will understand how to use social networks from mobile devices for their work.
- Trainees will be able to publish stories, and send out instant news updates.
- Trainees will learn how to stream audio and video live coverage.
- Trainees will learn how to micro-blog.
- Trainees will learn about the use of location, mapping and GPS in digital stories.

Session 1

Materials: PowerPoint presentations, flipcharts, video projector, trainees’ laptops and mobile phones, internet connectivity, how to videos

Presentation: What is MOJO? The history and development of digital media, as well as its tools and applications. Include interactive discussion about each trainee’s practice in each of the apps and tools mentioned. Cover how they use it and what the alternatives are in different smartphones. Include discussion of iPhones and Android-powered phones.

Background about smartphones: The trainer should cover the following basics of smartphones and their use in journalism to make sure trainees are up-to-speed.

1- Hardware. Invest in good mobile, accessories’ which helps you to create good digital story
2- Software, different software’s and apps which journalists can use for their work.
3- Service providers, internet connectivity, international roaming and Wi-Fi, web services.
4- Tips and aids for the use of Smartphones for filming video, taking good photos and recording good sound.

Session 2
Group work: Divide the trainees into groups and have each group develop a list of the tools and apps they use with their mobile devices (iPhones, Android phones, tablets, et cetera) in the process of developing a digital story. Have the trainees group them into the following areas, as well as rank them from best to worst (and explain their rankings and groupings).

Discuss the results
Following the discussion, the trainer should give a short presentation on best practices in using smartphones and mobile devices for digital journalism work.

**Background to the trainers:**

Mobile tools and skills offer journalists a range of new options for reporting. To help journalists decide how best to go mobile, Reynolds Journalism Institute fellow Will Sullivan published a mobile journalism reporting tools guide. This guide covers mobile hardware and software that can enhance your field reporting. It’s a great resource if you’re doing some holiday shopping for your journalist friends—or for yourself!

**Here’s what it covers…**

In the “hardware” section, the guide compares the features of several devices that can help you get the most out of your smartphone:

- Chargers and batteries
- Keyboards
- Lenses
- External microphones
- External lights
- Tripods
- Miscellaneous gear

And the mobile apps section compares programs for your phone that can enhance your mobile production capabilities for:

- Audio editing
- File transmission
- Geolocation
- Live Streaming
- Micro-reporting (i.e., Twitter)
- Note taking
- Photo editing
- Video editing

**Further reading:**


http://onlinejournalismblog.wordpress.com/tag/mojo/

http://multimediashooter.com/wp/2012/07/07/the-essential-mobile-journalism-kit/
http://www.uncp.edu/home/acurtis/Courses/ResourcesForCourses/PDFs/Shooting_Videos_with_Smartphone_and_Tablet.pdf
Lesson 21: Intro to Data Journalism

Materials: PowerPoint presentations, flipcharts, video projector, trainees’ laptops and mobile phones, internet connectivity, how to videos

Objectives:

- Trainees will understand what data journalism is.
- Trainees will learn the history of data journalism and be introduced to the data journalism handbook (the guide to digital journalism development).
- Trainees will learn the importance of digital journalism in the time of large data and statistics in tables and spreadsheets of information.
- Trainees will learn who works in the data journalism productions.
- Trainees will be introduced to the skills needed to work in data journalism.
- Trainees will learn about the sources of information in a data journalism story.

Good Resources:

- http://datajournalismhandbook.org/
- http://datajournalismhandbook.org/1.0/en/getting_data_0.html

Session 1

PowerPoint Presentation and Discussion: The process of the development of a data journalism story by using the following steps

1- Finding data in which there is a story interesting to the audience
2- Filtering data
3- Researching the information beyond data and clarification of information from different sources
4- Development of visualization which simplify the information and interconnect different components
5- Utilize different information gathered in the Development of the content of the story based on data, visualization and other sources
6- Visualize
7- Narrate
8- Socialize
9- Humanize
10- Personalize
11- Utilize and publish
12- Get feedback and make the follow-up

Discussion: What are the components of a data journalism story? What are the topics, fields of data journalism stories? What are the sources from which we can get such data in Tunis?

- http://www.africaopendata.org
- http://www.google.com/publicdata
- ScraperWiki
- Get The Data

Who can analyze data? Can I get help from statistics experts, how, when and how this can affect the story? What knowledge and skills a journalist need to work as a data journalist. What are the main factors on which a journalist can decide that he have a good input for data journalism story.

Session 2

Presentation: On the basic tools for analyzing and filtering data, and data visualization for the development of data digital story. The trainer should use some examples from the local context (perhaps the data sheets of the World Bank) for practical clarification and visualization of some of the data. The following should be covered as a starting point

- the use of Excel, PIVOT TABLES for analyzing and filtering data
- Google Fusion Tables: http://www.google.com/drive/start/apps.html#fusiontables

Session 3

Presentation: Video about the use of data visualization in producing a video story, followed by discussion.

Group Practical: divide the trainees into groups, and have each group use any source (including the World Bank data) about their area/country to find a story and try to develop a simple visualization of the data which can be used in a data journalism story by using excel sheets or Google fusion tables.

Additional visual tools available on the internet:

- Tableau Public
- Many Eyes
- Swivel
- Google Public Data Explorer
- Gapminder
- Wordle
- WorldMapper
- GunnMap
- StatPlanet Map Maker
- Data Wrangler
- Google Refine
- Tableau Public