Lesson 4

Audio   
-is sound within the acoustic range available to humans  
-the most sensuous element of multimedia

Amplitude or Volume – the loudness or softness of sound  
Decibel (db) – sound pressure is measured in  
Waveforms – sound waves are known for

Mono Channel – a term used to describe sound that comes from only 1 channel  
Stereo Channel – Uses two or more channel

Types of Audio  
-Background Music  
-Voice over  
-Sound Effects

Background music – typically the instrumental sound, songs, or music loops

Voice over – sometimes referred to as Narration, used to deliver concrete information, used to give instructions

Sound Effects – are cool little sounds meant to add a little excitement every now and then

Audio Equipment  
- Microphone – audio input  
- Speakers – audio becomes output  
- Earphones/Headphones  
-Headset  
- Amplifiers – enhance the sound of audio  
- Sound mixers  
-Audio editors

Sound Formats  
- MIDI (Musical Instrument Digital Interface)  
- Wave format (.wav)  
- Mp3 format (MPEG OR .MP3)

Audio Software  
-Adobe Audition  
-Audacity  
-Sound Forge

Advantages of using Audio  
-ensure important information is noticed  
-add interest  
-can communicate more directly than other media

Disadvantages of using Audio  
-easily overused  
-requires special equipment for quality production  
-not as memorable as visual media

**Lesson 5**

Video – Is a visual multimedia that combines a sequence of image to form a moving picture

Type of video  
-normal television and pc monitors  
-high definition television and widescreen monitors  
-cinemascope movies

Video quality   
- the resolution and clarity of individual frames  
- the frame rate or speed at which video frames appear. Frame rate is measured in frame per second(fps)

Video File Size  
- data rate for every second of the movie (measured in fps)  
- duration of the movies (measured in seconds)  
- compression and coded (formats)  
- quality and compression of the audio track

Common file formats  
- Audio Video Interleave (.avi)  
- Advanced Systems Format (.asf)  
- QuickTime (.mov or .qt)  
- Advanced Video Coding High Definition (AVCHD)  
- Windows Media Video (.wmv)  
- MPEG (Motion Pictures Expert Groups) compresses audio and video (.m4v & .mp4)

Video Software  
-Windows Movie Maker  
-iMovie  
- Final Cut Pro  
-Adobe Premiere  
- Quicktime Pro  
- PowerDirector

Linear Editing – start from beginning of the video and move through it until you find the scene you want to edit

Non-linear Editing – go directly to the scene you want to edit without having go through all the earlier scenes in the video

The Production Process  
-preproduction  
-production  
-postproduction

Preproduction Process  
-the big idea  
-scripting  
-planning the shoot

Production Process  
-borrow from other  
-create your own video

Postproduction Process  
-capturing  
-editing  
-compression  
-delivering

Camera movements  
Mounted camera creates the move  
1. Pan – when you move the camera horizontally, either right or left, while its base is fixated on a certain point  
2. Tilt – when you move the camera vertically, up to down, while its base is fixated to a certain point  
3. Pedestal – when you move the camera vertically up or down while it is fixated in one location

Camera and Operator or Devices move together  
1. Dolly – when you move the entire camera forwards and backwards, typically on some sort of track or motorized vehicle  
2. Floating stabilizer device – the device straps to the photographer and the camera is mounted by a series of metal joints controlled gyroscopes  
3. Crane or Boom – this works and looks similar to a construction crane. It is used for high sweeping shots.  
4. Handheld – you hold the camera without tripod, monopod or other devices

Only the Camera Lens Moves  
1. Zoom - the most used camera movement.  
2. Rack focus – Focus on one object, like an actor’s face and have everything behind him out of focus

Establishing shots – are the wide shots. It allows the viewer to take in the entire scene and as an establishing shot is often the first shot in a scene

Medium shots – can be a subject; or medium shot can be a tighter shot of a scene, that doesn’t include all the surroundings that a wide or establishing shot

Close up – shots are tightly cropped shots showing fine detail

Head Space / Headroom – when taking close shots of people there is often some space between the top of the head and the top of the frame

Lead Space / Noseroom – when you are taking a shot of someone and they are looking in a particular direction or the are moving in a particular direction, always leave as much space as possible in the frame where they are looking or going

**Lesson 6**

Animation – a rapid display of a sequence of images of 2-D artwork or model positions in order to create an illusion of movement

1800s   
-Scientists realized that a series of still images can be used to create the effect of a moving image  
-Optical toys are used to test out the effects of early animation

J. Stuart Blackton  
-Humorous Phases of Funny Faces  
-Stop Motion technique  
-Animation drawn on a blackboard

Winsor McCay  
- Father of character animation  
- Well known for his newspaper comics “Little Nemo in Slumberland” (1905-1914)

John Bray  
-Founder of the first animation  
-use of grayscale

Fleischer brothers (Max and David Fleischer)  
-Max Fleischer invented the rotoscopre technique  
-Betty Boop, Popeye, and Superman

Rotoscope – is device that originally used a movie projector to project a live action image on the back of a frosted glass pane

Otto Messmer   
-Felix the Cat (First animated character with personality)

Walt Disney  
-Producer, Director, Screenwriter, Voice-over, and animator

Principle of animation  
-squash and stretch  
-anticipation  
-arcs  
-ease in and out

Squash and Stretch – when a moving object comes into contact with another object, it deforms upon impact unless it is completely rigid

Anticipation – cues or prepares the audience for a major action the character is about to perform

Arcs – the visual path of action from one extreme to another

Ease In and Out  
Ease in – motion begins slowly, before gaining speed  
Ease out – motion will slow down before coming to a stop

Concept – original idea about three elements that will make the animation memorable

Story – The most important part of any animation

Two main categories of stories  
-fact : what actually happened  
-fiction : events that are imagined to have happened

Storyline – plot of a novel, play, movie

4 ways of writing stories  
-something that happened to you  
-something that happened to someone you know  
-something imaginary based on a factual situation  
-something totally imaginary

Dramatic twist – unexpected turn

Character  
- in designing a character we look at two aspects: form and face  
- we remember the form rather than the details

Parts of a Storyboard  
-scene number  
-frame number  
-duration  
-scene title  
-storyline  
-camera angle/views  
-dialogue/narration  
-sounds