AVP 100 Introduction to Audio/Video Production

Course Description: A course on foundation principles of videography and lighting, audio and sound design, and video editing and post production. Topics include: industry vocabulary, workflow, and professional practices.

Prerequisites(s): None **Corequisite(s):** None

Lecture Hours: 4	Lab Hours: 1	Credit Hours: 4
Lab Fee: 35	Supplemental Fee: 0	Purpose:
☐ Transfer Assurance Guide Course (TAG)	☐ Transfer Module Course (TM)	
Course Format: Lec/Lab	Grading: A/B/C/D/F/I	
Delivery Method: □ Web	□ Hybrid	□ Classroom
Semesters Offered: □ Fall	□ Spring	□ Summer

Course Primary Text:

Practical Recording Techniques 7th Edition
(Bruce Bartlet/Focal Press/ISBN-10: **0240811445**)
The Grammar of the Edit 3rd Edition
(Roy Thompson, Christopher Bowen/Focal Press/ISBN-10: **024052120X)**
The Grammar of the Shot 3rd Edition
(Roy Thompson, Christopher Bowen/Focal Press/ISBN-10: **0240521218)**
Cinematography: Theory and Practice, 2nd Edition
(Blain Brown/Focal Press/SBN-10: **0240812093)**
Motion Picture and Video Lighting, 2nd Edition
(Blain Brown/Focal Press/SBN-10: **0240807634)**
You will be responsible for all content in the assigned chapters as well as all concepts and topics in lectures, labs and handouts. You are responsible for all assignments that are given throughout the term. The instructor will not, under any circumstances, provide written lecture notes to students.
A copy of the required text is on file in the campus library.

Materials:

Supplies (Required at the beginning of semester 1 or prior to AVP100)
Some, but not all, items below are available in the campus bookstore.
1 Pair of full coverage headphones (no earbuds),
USB jump drive (16 gig or larger),
External media drive (1 terabyte or larger – 7200 rpm or SSD USB3)

(AVP Majors and those taking the full sequence of audio and video classes)
Some, but not all, items below are available in the campus bookstore.
All students must have the basic list of tools and hardware listed by semester 2:
1 Pair leather work gloves (no rubber or nylon finger material - full coverage leather)
Multi-purpose tool (ie: gerber or leatherman or equivalent)
2x32gig or larger SDHC media cards
Small Flashlight

Measuring Tape *Note: External drive must be 7200 rpm or faster (or SSD) and should have the Oxford chipset (either 911 or 934), USB and Lightningbolt compatible and have* 1 terabyte or larger *capacity; however, a larger size is recommended for AVP majors as you will be required to have a media drive for your video, audio and compositing classes. See the additional AVP Equipment list for more details on theses and other tools used in the AVP major.*

Course Outcomes:

Students will:

- Gain an understanding of the basic vocabulary and foundations of Audio Production and sound recording including but not limited to simple and complex sound waves, analog-to-digital conversion and digital audio workstations and the protools environment.
- Discuss the principles, theory and vocabulary associated with, but not limited videography, gripology, and basic lighting design.
- Understand the basic concepts of pre-production and project management.
- Gain an understanding of the basic vocabulary and process of video editing from project concept, through completion
- Gain practical experience through in class labs utilizing industry hardware and software

Course Topics:

Week 1	(Class 1 Syllabus and Full Course Introduction Supplies and required materials for this course (Printed in syllabus and in the Bb course Welcome Announcement) Basic Overview of Blackboard Course Class room passes for the semester Lab rules and procedures Media Drive Formatting and management directories, course folders, project folders and files Mac Basics – Proper Login/Logout! Computer Desktop is not a personal dumping ground Assign – Recording Scenarios Handout on Bb **Audio Recording and Production** Class 2 Brief history (highlights) of magnetic recording (45 minutes) Difference between Etched and Magnetic Steel Wire from Smith to Poulsen and beyond Les Paul and Sound On Sound (Pre cursor to multi-track) Mono to Stereo and Stereo as Independent 2 track Multi-track and its evolution Web references – for a deeper dive https://www.theregister.co.uk/2013/09/09/history_of_magnetic_tape_part_one/?page=5 http://www.aes-media.org/historical/html/recording.technology.history/begun1.html

	https://h2g2.com/edited_entry/A3224936 Recording Scenarios (75 minutes) Live Scenarios (Live to 2 track and Live to Multi Track) Traditional In Studio Multi Track (both Tape and DAW) Location Recording (So many things to consider BUT often overlooked or forgotten!!!) (Pg 165 in GOS video book + emphasize the LACK of info on sound for picture as it only get a sidebar mention in our Cinematography text on pg 300) Midi Production
Week 2	(Sound And Signals (reading - Chapter 1-3 Practical Recording) Quiz - types, positions, scenarios and history (5 essay style questions 3pts each) Cymatics Video- Visualization of Sound to begin the discussion. https://vimeo.com/111593305 The anatomy of the sound wave Compression / Rarefaction Amplitude Peak Trough Frequency Wavelength Envelope Complex Waves Fundamental Frequency & Harmonics Piano Keyboard - http://www.vibrationdata.com/piano.htm Overtones and Upper Partials Envelope Noise floor Headroom Signal to noise ratio Phase Shift Phase cancellation Recognition exercises (Listening and Practice) Frequency Range (Low/Low mid/Mid/High mid/High) Shape (Sine/Saw/Triangle/Square) Harmonics Phase
Week 3	Quiz - Sound and Signals (15 questions) Lecture - What is “Digital” recording (PowerPoint Deck for Lecture and/or Review) (Reading - Chapter 13 in 6th edition) A/D conversion Process

	Quantization Process Sampling frequency (What it Means) Bit depth / Word Length (What it Means) Interpolation Nyquist Theorem Dither Some Standard Sampling frequencies and Bit Depths • Red Book (CD Quality) 44.1 kHz 16 bit •Audio for DV Video 48kHz 16 Bit Native Audio File Types .AIFF (Mac) .WAV (PC) .mp3 / .mp4 / AAC Stereo Interleaved Files Lossless vs Lossy Compression
Week 4	Quiz – Digital Audio / A to D conversion (15 questions) -Protools Workspace tour Protools Interface & continuation of Digital audio *Formats, files and naming convention* *-Explanation of ProTools (multitrack recording, editing, mixing and mastering, software/hw combo)* *-Session -it's a folder, not a PTF file.* *-inside: ptf, audio files, any other related data* *-keep it together!* *-ptf file is treasure map, audio files folder is gold* *-new session settings dictate what to do with record, import* *-record mono, stereo, import mono, stereo (copy or convert, never ADD)* *File Management -audio vs regions (instances) parent , child* *-complete regions (bold) vs. sub-regions (plain text)* *-video (region boundaries/window frame metaphor)* *-stereo vs. mono regions* Class 8 - Audio Lab Introduce :60 Radio Spot - Wild American Summer on Student Resources AVP100 Folder Demonstrate Workflow AVP100_Semester Folder •Audio Lab Folder •Media Copy into Audio Lab Folder •Launch Protools and target session and other PT folders to the Audio Lab Folder •Demonstrate Session edit, mix and Bounce to Proper place with Proper File Name (See Lab Rubric) •Upload to Bb Assignment

Week 5	Class 9 Audio Lab •Open Lab for students to complete the Audio Edit • Upload to Class folder in AVP Share Sever Assign Reading For Up-Coming Camera and Lighting Lecture Film Space (Cinematography pg 1 - 28) Visual Language (Cinematography pg 29 - 44) Framing and Composition (Grammar of the Shot pg 1 - 92) **PRODUCTION-CAMERA/LIGHTING** Class 10 General discussion of camera and field audio technology, support & movement (PowerPoint Deck For Lecture and/or Review) JVC GY150 = 35 mbps HD /SD 720 and 1080 in SDHC format Canon T-series = HD /SD 720 and 1080 DSLR in SDHC format (audio concerns and better depth of field) Panasonic AG=35 mbps HD /SD 720 and 1080 in SDHC format Sony EX1 = 35 mbps HD /SD 720 and 1080 in SXS format GoPro Hero = 720 and 1080 in SDHC format (image quality is sacrificed for rugged and small system) Pre assign Reading – Film Space (Cinematography pg 1 - 28) Visual Language (Cinematography pg 29 - 44) Framing and Composition (Grammar of the Shot pg 1 - 92) Visual Organization (Powerpoint Deck for Lecture and/or Review) Design Space – Unity, Balance. Visual Tension, Rhythm, Proportion, Contrast, Texture, Directionality lines, angles and Sinuous S
Week 6	Class 11 Rule of Thirds Head Room Nose Room Language of the Lens (Focal Length and the expansion and compression of space.) Building Blocks of a scene (The Frame) •Establishing Shot

	•Master Shot •Wide / Long Shot / Full •Cowboy •Medium •Close-up (CU) •Extreme Close-up (ECU) •Two Shot •Over the Shoulder (OTS) •Dirty Single •Insert/Cutaway •POV •Connecting Shot •Transitional Shot Class 12 Viewing and discussion (full day) – Watch examples of the Building Blocks (Examples With/Without Grid – Sky fall, Good Fellas, Shawshank, The Shinning, Good Will Hunting)
Week 7	Class 13 Quiz - Film space and visual Language (15 questions) Lighting Sources & Fundamentals (Pg 1-57 in Lighting and 238 - 284 in Cinema) Continue viewing and discussion 180 Degree Rule and the axis of Action Lighting Basics Key Fill Back Kicker Head Background Hard light vs Soft Light Diffusion – Chimera/soft box/silk/gel Light as a character and lighting for mood Ambient Light Practical Light Motivational Light Spend time watching. Begin with the Motion Picture Lighting DVD (Sources and 7 Methods) Assign Shot Composition Lab (out of class assignment. Class 14 Lighting Sources & Fundamentals Basic Color Theory and Temperature White Balance and Cool Balance Tungsten / Kino / HMI / LED CTO and CTB (lighting pg 128 - 148) Brief Lecture Set Operations

	Crew Positions, and Pre Production Protocol (Cinematography pg 240 - 256) Open Discussion and Review Of Pre Production and Set Operations /wardrobe etc…) Fall Semester - The Social Network
Week 8	Quiz Lighting Fundamentals (15 questions) Assignment due (Out of Class Lab) – Using personal camera (cell phone will be acceptable) shoot, create a contact sheet, label and upload to Bb the 12 required building blocks. Utilize the rule of 3rds and pay close attention to light and exposure here as well. (MS power point (template given) can be used to lay this out and save as .pdf) Script Writing Discussion (Screenplay Format) Using the EditStock Stranger at the Door Project as reference review the script/lined script and facing pages Draw attention to the proper formatting and level of detail. Assign Take home Quiz – Scene Dissection (Writing what you see–This counts as a quiz grade) Take Home Quiz document will contain a link to a 1-2 minute scene. Write out the framing, composition, and detail (emotion, prop/wardrobe etc… Follow the rubric and instructions. There is a chance for 5 extra credit points here for proper transcription and formatting of the dialogue) DK - The Social Network "It's Raining"
Week 9	Class 16 Provide set of C-State Documents. Board, Location Scout, Multi Purpose Release, Shot Log Additional Homework – Digital Video Handout and Study Guide (Using Texts and research try to answer the following questions and be prepared for in class discussion. Class 17 (Lecture "What is Digital Video") also - begin to memorize the glossary of terms on pg. 171-197 in NLE's and the history of Editorial (Lecture from "What is Digital Video Handout") (Tape vs tapeless/SD vs HD/standard vs DSLR (Workflow, Timecode basics, formats, codecs and basic video compression) SD and HD Raster sizes SD and HD Aspect ratios SD and HD Pixel Aspects Luma Values Chroma Values Common Frame Rates SD and HD - 30i and 29.97 drop frame Other frame rates 23.976, 24, 25, 501, 60i, 120 Camera CCD's, Video Codecs and Wrappers Legacy Media and why we still need to understand how to manage it How interlaced video and progressive video scan an image Cabling Systems (composite, S-video, component, HDMI)

	Viewing Assignment - Watch the documentary "The Cutting Edge" (outside of class)
Week 10	Class 18 & 19 Assign Essay Topic The role of the editor (Grammar Chapters 1&2) Stages of the editing Process (Note how this has evolved with the introduction and wide use of Tapeless Camera Systems) Acquisition Organization Review & Select Assembly Rough Cut Fine Cut Final Sound Design Color Correction Delivery Basic Edit Transitions Cut Dissolve Wipe Fade Jump Cuts 30 & 180-Degree Rules Revisited Continuity of Action / Overlapping action Grammar of the edit (Chapters 3&4) Understanding the footage - When to cut and Why What factors help make a transition a good edit? Information Motivation Composition Camera Angle Continuity Sound *****Also stress that editors will often "Cut With Their Gut" but they will always be able justify the editorial decisions. Watch examples and discuss as time allows
Week 11	The role of the editor (Grammar Chapters 1&2) Stages of the editing Process (Note how this has evolved with the introduction and wide use of Tapeless Camera Systems) Acquisition Organization Review & Select

	Assembly Rough Cut Fine Cut Final Sound Design Color Correction Delivery Basic Edit Transitions Cut Dissolve Wipe Fade Grammar of the edit (Chapters 3&5) Understanding the footage - When to cut and Why What factors help make a transition a good edit? Information Motivation Composition Camera Angle Continuity Sound *****Also stress that editors will often "Cut With Their Gut" but they will always be able justify the editorial decisions. (Watch examples and discuss) Viewing homework (Counting the cuts and transitions)
Week 12	Class 20 Quiz - Edit Basics Grammar of the edit (Chapters 3&5) Understanding the footage - When to cut and Why continued Five major categories of edit types Action Edit Screen Position Edit Form Edit Concept Edit Combined Edit Things to consider and look for: Jump Cuts Inconsistent Eye Lines Inconsistent Action Lines 30 & 180-Degree Rules Use of Inserts and Cutaways Viewing homework (Writing what you see and hear) Discussion of basic script layout / 2 column format Viewing homework (Writing what you see and hear - taking it further using script format) This counts as a quiz grade

	Class 21 Overview of NLE's like PREMIER, AVID & FCP Premier Set up & Workspace tour Session hierarchy and setup 4 main screens in the interface / Bin and media management Drive formatting review and best practice for editing
Week 13	Class 22 Quiz – Editing and workflow Introduce Premier Editing Lab (Open Scene for "Bingo Night") Review Lined script and editors log Demonstrate Workflow AVP100_Semester Folder •Video Lab Folder •Media Copy into Video Lab Folder •Launch Premier and target session and scratch disks to the Video Lab Folder •Demonstrate Session edit, mix and export to proper place with Proper File Name (See Lab Rubric) •Upload to Bb Assignment Class 23 Open Lab for video edit project
Week 14	Class 24 Open Lab for video edit project Class 25 Premier Export and turn in Edit Lab Essay assignment due Review for final
Week 15	Class 26 Final Exam 50 Question Comprehensive

Methods of Evaluation/Assessment

Grading	**(300 points total)**	**Grading Scale**
Quizzes (possible 9)	15 pts each	100 - 90% - A
Final Exam	50 pts	89 - 80% - B
Written Essay	15 pts	79 - 70% - C
Audio Editing Lab	30 pts	69 - 60% - D
Shot Framing Lab	40 pts	59 - 00% - F
Audio Editing Lab	30 pts	

Attendance/Grading Policy

Students are required to attend all class meetings and to come prepared for class. Unapproved absences will result in a reduction in your final grades as follows:

3 missed class sessions -10%
4 missed class sessions -20%
5 missed class sessions will result in a failing grade

Attendance will be taken at the beginning of every class. If you are more than 20 minutes late for class you will be counted as absent. Students are responsible for any material missed due to absence.

Cell Phone Policy

Your cell phone must be turned off and out of view in this class. If there is a special situation that requires you to be available by cell phone during class time you must alert the instructor prior to class and set your phone to silent/vibrate. You will be asked leave the class session and will be counted absent if this policy is ignored.

PLEASE TAKE THE FOLLOWING INTO ACCOUNT

- Students will not be permitted to make up any tests/quizzes or submit assignments for unapproved absences.
- Students are required to inform instructor if they will not be attending class or will be late due to an emergency situation. Late assignments/exercises will not be accepted for unapproved absences.
- Documentation may be requested for approved absences.
- Arrangements to turn in work due during class missed because of an approved absence will be dealt with on a case-by-case basis. It is the student's responsibility to make these arrangements.
- Having to work is not an excuse. If your work schedule does not permit you to attend class, please drop the course and take it when it is a priority.

Plagiarism/cheating will not be tolerated and will result in a failing grade for the assignment as well as a failing grade for the course. Students will be reported to the division Dean and will be asked to meet immediately with their academic advisor.

Copying or downloading, in part or in total, articles, research papers or any other information, including graphics, found on the Internet is considered plagiarism and will not be tolerated. All resources, whether quoted directly or indirectly, must be properly documented.

Definition-

Plagiarize: to steal or pass off as one's own (the idea or words of another); use (a created production) without crediting the source; to commit literary theft; present as new and original an idea or product derived from an existing source. (*Webster's Third New International Dictionary of the English Language*, Unabridged, p. 1728)

The instructor reserves the right to modify or adjust the syllabus and assignments any time throughout the course.