BOROUGH OF MANHATTAN COMMUNITY COLLEGE

The City University of New York
Department of Media Arts and Technology

Title of Course: VAT 100-3000 Introduction to Video Technology
Tuesday/Thursday, 1:50-3:05 PM
Room S533M

Class Hours: 2
Laboratory Hours per Week: 1
Credits: 3

Semester: Spring 2024

Instructor Information: Prof. Lorraine Singletary
Email: LSingletary@bmcc.cuny.edu
Office Hours: Thursday 1-1:30 pm By Appointment
CLT: Miguel

Course Description: This course explains how video technology works and how that technology is put into practice to create video content. It covers the fundamentals of contemporary media technology including understanding video image formation, data compression, as well as picture and sound generation and manipulation. Lab exercises introduce students to the
operations of cameras, video-recording systems, lighting instruments, microphones and the uses of SMPTE Time Code. Students also learn basic practical and aesthetic concepts of filmmaking by pre-producing and filming in-class exercises.

Prerequisites: English Proficiency Index 55+ or completion of a comparable course and Math Proficiency Index of 40+ or completion of a comparable course

Corequisites: None

Course Student Learning Outcomes (Students will be able to…)	**Measurements** (means of assessment for student learning outcomes listed in first column)
1. Use and calibrate cameras, microphones, video and audio components and lighting equipment.	1. Quizzes, assignments and final examination
2. Identify video and audio editing and delivery systems	2. Quizzes and final examination
3. Categorize the standards and practice of the video industry including SMPTE time code, broadcast and transmission standards, aspect ratio, and RGB color.	3. Quizzes and final examination

Below are the college's general education learning outcomes, the outcomes that are checked in the left-hand column indicate goals that will be covered and assessed in this course. (Check at least one.)

	General Education Learning Outcomes	Measurements (means of assessment for general education goals listed in first column)
☐	**Communication Skills-** Students will be able to write, read, listen and speak critically and effectively.	
☐	**Quantitative Reasoning-** Students will be able to use quantitative skills and the concepts and methods of mathematics to solve problems.	
☐	**Scientific Reasoning-** Students will be able to apply the concepts and methods of the natural sciences.	
☐	**Social and Behavioral Sciences-** Students will be able to apply the concepts and methods of the social sciences.	
☐	**Arts & Humanities-** Students will be able to develop knowledge and understanding of the arts and literature through critiques of works of art, music, theatre or literature.	
■	**Information & Technology Literacy-** Students will be able to collect, evaluate and interpret information and effectively use information technologies.	Through practical hands-on instruction as well as through periodic testing.
☐	**Values-** Students will be able to make informed choices based on an understanding of personal values, human diversity, multicultural awareness and social responsibility.	

Required Text: Video Basics, 8th Edition
Author: Herbert Zettl
Publisher: Wadsworth Cengage Learning
ISBN-10: 9781305950863 ISBN-13: 978-1305950863

Other Resources: Handouts provided in class/ Articles, video and other resources posted on Blackboard

Use of Technology (If Applicable):

Evaluation and Requirements of Students: **Calculation of Final Grades:**

- **Quiz #1 15%**
- **Quiz #2 15%**
- **Homework #1 10% (5% for presentation + 5% for paper)**
- **Homework #2 10% (Lookbook)**
- **Final Project Pitch 5%**
- **Final Project Pre-production Materials 5%**
- **Final Project Filming 10%**
- **Final Exam 20%**
- **Participation 10%**

Professionalism:
In addition to gaining a firm grasp of the technical and practical applications of digital video production, it is the goal of this course to help each participant gain new confidence in working with new technologies. Within this context we will create an atmosphere of congeniality that will lead to an active, working group dynamic. Teamwork and a pleasant, attentive attitude among all participants are essential in all aspects of video production. Without these elements, projects fail, money and time are wasted needlessly and people lose jobs.

SCHEDULE OF CLASSES (Subject to change)
VAT 100 Introduction to Video Technology – Section

Week 1

Tuesday 1/30:
Video Basics 8, Read Chapters 1&2
Introduction, Assignments & Overview
Lecture: Production cycle, production crew jobs.

Thursday 2/1:
Lecture: The evolution of the moving image; film cameras; a short history of television; basic image formation; interlaced vs. progressive scanning.
Video Basics 8, Chapter 3, pp. 38-53

Week 2

Tuesday 2/6:
Lecture: Camera Lens
Video Basics 8, Chapter 4

Thursday 2/8:
Lecture: Basic Camera Function and Elements/ Exploring the Camera Menu

Lab: Intro to cameras, mounting cameras on tripods, accessing and changing menu settings, camera safety.

Week 3

Tuesday 2/13:
Lecture: Continue, Basic Camera Function and Elements/ Exploring the Camera Menu

Lab: Hands-on exploration of the major parts of the camera: lens, focus ring, zoom, calibrate lens, etc. Zooming module.

Thursday 2/15:
Lecture: Digital Video
Video Basics 8, Chapter 3 & 11

Lecture: What is digital and why are digital images and audio different from analog ones? Picture quality comparisons utilizing different types of video are demonstrated.

Week 4

Tuesday 2/20:
Lecture: Continue, Basic Camera Function and Elements/ Exploring the Camera Menu

Lab: Hands-on exploration of the major parts of the camera: lens, focus ring, mounting cameras on tripods, accessing and changing menu settings. Adjusting Iris, gain, neutral density filter, white balance. In camera light change module.

Thursday 2/22:
NO CLASS: Classes at BMCC follow a Monday schedule

Week 5

Tuesday 2/27:
Camera Movements / Shots Types/ Elements of Image Composition
Video Basics 8, Chapter 5, pp, 78-129
Lecture: Basic camera movements, camera mounts, operational features, framing principles, manipulation of picture depth, etc.

Thursday 2/29:
Review for Quiz #1
Lab: Experimenting with camera movement, calibrating the zoom lens, etc. Focus on camera movement, focusing, zooming. Shot size module.

Week 6

Tuesday 3/5:
Quiz #1
Lecture: Microphones
Video Basics 8, Chapter 7, pp. 131-149
Types and use of microphones. Pickup patterns.

Thursday 3/7:
Lecture: Microphones
Video Basics 8, Chapter 7, pp. 131-149

Lab: Students identify a variety of microphones, also naming the generating element and pickup pattern. Recording the same source under identical recording conditions with different mics will be demonstrated.

Week 7

Tuesday 3/12:
Microphones
Lab: In-class filming (in groups): Interview: Using the audio and video equipment to conduct brief interviews.

Thursday 3/14:
Lecture: Interior and Exterior Lighting, Part I
Video Basics 8, Chapter 8, pp. 168-181
Lecture: Discussion of lighting concepts, such as directional and diffused light; color temperature; looking at examples of lighting in film and photography; equipment safety.

Week 8

Tuesday 3/19:
Lecture: Interior and Exterior Lighting, Part II. Three-point lighting.
Video Basics 8, pp. 181-205

Lab: Assembling and disassembling portable light kits;

Thursday 3/21:
Interior and Exterior Lighting, Cont.
Lab: In-class filming (in groups): Students try out three-point lighting. Creating mood through light and use of color. Demonstration of home-made lighting instruments. Same composition, first in high-key and then in low-key style.

Week 9

Tuesday 3/26:
Homework #1 Due/ Student Presentations

Thursday 3/28:
Lab: Production practice / full set. Intentional lighting.

Week 10

Tuesday 4/2:
Lecture: The Production Process
Video Basics 8, Chapter 1, pp. 1-35, Chapter 17, 387-393
Lecture Notes and Handouts
How to prepare for filming; Shot list

Thursday 4/4:
Lecture: The Production Process
Video Basics 8, Chapter 1, pp. 1-35, Chapter 17, 387-393

Lecture: How to prepare for filming; directing concepts; the 180-degree rule; filming for continuity; set protocol
Review for Quiz #2

Week 11

Tuesday 4/9
Quiz #2
Lecture: The Production Process
Lab: The production, filming with a shot list utilizing directing and continuity concepts.

Thursday 4/11
Lecture: Principles of Graphics/ VFX Effects
Video Basics 8, Chapter 9, pp. 206-223, Chapter 11, pp. 242-255

Week 12

Tuesday 4/16:
Lab: **Pitching Day:** Students pitch their ideas for the final project, to be filmed in class.

Thursday 4/18:
In class workshop; storyboards/shot lists/breakdown sheets for final project

Week 13

Tuesday 4/23:
NO CLASS: Spring Break

Thursday 4/25:
NO CLASS: Spring Break

Week 14

Tuesday 4/30:
NO CLASS: Spring Break

Thursday 5/2:
Lecture: Editing the Production
Video Basics 8, Chapter 12, pp. 256-271, Chapter 13, pp. 272-291
Editing principle and system setup; editing phases; organizing the material; aesthetics of editing, etc.

Week 15 Tuesday 5/7: Rehearsal / Blocking / **In-class filming : Final projects, (Group A)** Thursday 5/9: Rehearsal / Blocking / **In-class filming : Final projects, (Group B)**
Week 16 Tuesday 5/14: **In-class filming : Final projects, (Group A)** Thursday 5/16: **In-class filming: Final projects, (Group B)**
Week 17 Tuesday 5/21: **Homework #2 Lookbooks Due** (Brief presentations) Thursday 5/23: **Screening of final projects** **Final Examination**

Class Participation
Participation in the academic activity of each course is a significant component of the learning process and plays a major role in determining overall student academic achievement. Academic activities may include, but are not limited to, attending class, submitting assignments, engaging in in-class or online activities, taking exams, and/or participating in group work. Each instructor has the right to establish their own class participation policy, and it is each student's responsibility to be familiar with and follow the participation policies for each course.

BMCC Policy on Plagiarism and Academic Integrity Statement
Plagiarism is the presentation of someone else's ideas, words or artistic, scientific, or technical work as one's own creation. Using the idea or work of another is permissible only when the original author is identified. Paraphrasing and summarizing, as well as direct quotations, require citations to the original source. Plagiarism may be intentional or unintentional. Lack of dishonest intent does not necessarily absolve a student of responsibility for plagiarism. Students who are unsure how and when to provide documentation are advised to consult with their instructors. The library has guides designed to help students to appropriately identify a cited work. The full policy can be found on BMCC's Website, www.bmcc.cuny.edu. For further information on integrity and behavior, please consult the college bulletin (also available online).

Gender-Inclusivity
BMCC community members have the right to use and be referred to according to their preferred name, title, and/or personal pronouns. Everyone also has the right to use all spaces according to their self-identification, including restrooms and locker rooms. To learn more about how to change your preferred name and affirm your

gender identity at CUNY (including requesting a new ID card and/or email address), go here: https://www.bmcc.cuny.edu/student-affairs/lgbtq/
Anyone who has experienced harassment related to gender or sexual identification, who needs assistance, or who wishes to file a complaint, can contact the Office of Compliance and Diversity: https://www.bmcc.cuny.edu/about-bmcc/compliance-diversity/.

FREE BMCC STUDENT SUPPORT SERVICES

BMCC is committed to the health and well-being of all students. It is common for everyone to seek assistance at some point in their life, and there are free and confidential services on campus that can help.

Advocacy and Resource Center (ARC) https://www.bmcc.cuny.edu/student-affairs/arc/ room S230, 212-220-8195, arc@bmcc.cuny.edu. If you are having problems with food or housing insecurity, finances, health insurance or anything else that might get in the way of your studies at BMCC, contact the Advocacy and Resource Center (formerly Single Stop) for assistance. Please contact us at arc@bmcc.cuny.edu, call 212-220-8195, or come by the office at room S230. You may also contact the Office of Student Affairs, S350, 212-220-8130, studentaffairs@bmcc.cuny.edu, for assistance.

Counseling Center www.bmcc.cuny.edu/counseling, room S343, 212-220-8140, counselingcenter@bmcc.cuny.edu. Counselors assist students in addressing psychological and adjustment issues (i.e., depression, anxiety, and relationships) and can help with stress, time management and more. Counselors are available for walk-in visits.

Office of Compliance and Diversity https://www.bmcc.cuny.edu/about-bmcc/compliance-diversity, room S701, 212-220-1236. BMCC is committed to promoting a diverse and inclusive learning environment free of unlawful discrimination/harassment, including sexual harassment, where all students are treated fairly. For information about BMCC's policies and resources, or to request additional assistance in this area, please visit or call the office, or email olevy@bmcc.cuny.edu, or twade@bmcc.cuny.edu. If you need immediate assistance, please contact BMCC Public safety at 212-220-8080.

Office of Accessibility www.bmcc.cuny.edu/accessibility, Students who need academic accommodations in connection with a disability must initiate the request with BMCC's Office of Accessibility (OA). Students need to register with the Office of Accessibility in order to officially disclose their disability status to the College and to determine eligibility for appropriate reasonable accommodations (including any prior IEPs or 504s). Please contact the OA at the start of the semester (or as soon as possible) to coordinate any accommodation request/s: www.bmcc.cuny.edu/accessibility, Room N360 (accessible entrance: 77 Harrison Street), 212-220-8180, accessibility@bmcc.cuny.edu.

Care for Yourself

Understand how stress can affect you.

Stress Can Cause:

- Feelings of fear, anger, sadness, worry, numbness or frustration
- Changes in appetite, energy, desires and interests
- Difficulty concentrating and making decisions
- Difficulty sleeping or nightmares
- Physical reactions, such as headaches, body pains, stomach problems and skin rashes
- Worsening of chronic health problems

- Worsening of mental health conditions
- Increased use of tobacco, alcohol and other substances
- It is natural to feel stress, anxiety, grief and worry during the COVID-19 pandemic. Below are ways that you can help yourself, others, and your community manage stress.

Learn healthy ways to cope with stress.

- Take breaks from the news.
- Take care of your body.
- Take deep breaths, stretch, or meditate.
- Try to eat healthy, well-balanced meals.
- Exercise regularly.
- Get plenty of sleep.
- Avoid excessive alcohol, tobacco and substance use.
- Make time to unwind. Try to do some other activities you enjoy.
- Connect with others. Talk with people you trust about your concerns and how you are feeling.
- Connect with your community- or faith-based groups. While social distancing measures are in place, try connecting online or by phone.

https://www.redcross.org/get-help/how-to-prepare-for-emergencies/types-of-emergencies/coronavirus-safety/coping-with-stress-during-covid-19.html