



**IUPUI**

SCHOOL OF INFORMATICS AND COMPUTING  
Department of Human-Centered Computing

## **NEWM-N 458**

### **Beyond the Frame: New Forms of Video Production**

**Media Arts and Science Program**

**Spring 2020**

**Section:** **Credits:** 3  
**Time:** Tuesdays, 3–5:40 pm  
**Location:** IT 468, Informatics & Communications Technology Complex  
535 West Michigan Street, Indianapolis, IN 46202  
**First Class:**  
**Instructor:** C. Thomas Lewis, MFA (Film)  
**Office:** IT 473  
535 West Michigan Street, Indianapolis, IN 46202 [[map](#)]  
**Hours:** Tuesday, 12:00-2:00, or by Appointment  
**Phone:** (317) 278-3799 (Office)  
**Email:** lewisct@iupui.edu  
**Prereqs:** NEWM-N 253, N353, (N357 Recommended, could be co-requisite)

#### **Course Description**

This course explores various emerging video forms. Students will draw upon their foundational knowledge and skills of conventional production and post-production to create videos using emerging technology. Such technology could include 360° stereoscopic video, branching video, database cinema, projection mapping, and immersive filmmaking.

#### **Textbook**

There is no required textbook for this course. However, it uses an [online tool \(links to an external site\)](#) developed for understanding photographic principles.

#### **Links to Online Resources**

Millumin projection mapping software: <https://www.millumin.com/v3/index.php>

360° stereoscopic video camera: Vuze+ <https://vuze.camera/>

360° stereoscopic software Mettles Skybox Studio that has been integrated into Adobe After Effects: <https://www.mettle.com/product/skybox-studio-v2/>

Eko Branching Video Software: <https://helloeko.com/>

Unity template developed for this course to embed 360° nodes in single environment <https://iu.box.com/s/xwkrcecl2lv3h8k8ranb983jb6udwvf25>

Database Cinema: [https://en.wikipedia.org/wiki/Database\\_cinema](https://en.wikipedia.org/wiki/Database_cinema)

Matterport 3D immersive camera: <https://matterport.com/>

## Teaching and Learning Methods

Lectures about principles of production, design, and interactivity

Lab for in-class development of assignments

In-class demonstrations of software and techniques of design

Video tutorials on various software techniques

Student planning from concept development through pre-production, production, and post-production

## Program Level Outcomes (PLOs selected from the list of 10 outcomes)

1. Understand digital media and its effective use as a form of communication
4. Analyze a problem, identify and evaluate alternatives and plan an appropriate solution.
5. Appreciate the history, theory and traditions of digital media. Evaluate media from multiple perspectives using the theories, concepts and language of digital media
6. Demonstrate mastery of the concepts, techniques and tools in one or more digital media specialties

Visit <http://soic.iupui.edu/undergraduate/degrees/media-arts/learning-outcomes/> to learn more about the Program-Level Learning Outcomes and <https://academicaffairs.iupui.edu/Strategic-Initiatives/IUPUI-Plus> to learn more about IUPUI Profiles of Learning for Undergraduate Success.

## Alignment of CLOs with Revised Bloom's Taxonomy of Cognitive Domains, PLOs and Profiles of Learning for Undergraduate Success (IUPUI+)

CLOs	RBT*	PLO†	IUPUI+‡	Assessment
1. Demonstrate prior knowledge and skills of conventional video production in emerging video forms.	3	4, 5	P2.3 Problem Solver: Analyzes, synthesizes & evaluates	The foundational knowledge evident in class projects
2. Design for emerging video forms, applying methods effectively.	3, 5, 6	.1	P3.2 Innovator: Creates/Designs	The artistry and production values evident in class projects
3. Demonstrate proficiency with the tools and technology of emerging video production.	3	.6	P2.3 Problem Solver: Analyzes, synthesizes & evaluates	The software skills evident in class projects.
4. Devise and execute creative concepts of representation and storytelling as they pertain to emerging video forms.	3, 6	.4	P2.4 Problem Solver: Perseveres P3.3 Innovator: Confronts Challenges	The awareness of and adeptness with the creative considerations of visual depiction as evident in class projects.

\* Revised Bloom's Taxonomy: 1. Remembering, 2. Understanding, 3. Applying, 4. Analyzing, 5. Evaluating, 6. Creating

† Program-Level Learning Outcomes.

‡ Profiles of Learning for Undergraduate Success (IUPUI+)

## Course Topics and Objectives

- To teach considerations and methods of production and post-production for various forms of emerging video production
- To give direct, hands-on experience of the hardware and software tools involved in various forms of emerging video production

Software: DaVinci Resolve, Eko Studio, Adobe After Effects, Plexus, GoPro Kolor, Mettle

Classroom Materials:

- External Thunderbolt or USB3 – 3TB GB minimum
- Flash Drive
- Headphones (Should bring to every class once you begin editing)

## EXPECTATIONS, GUIDELINES, AND POLICIES

### Attendance

As with all classes, attendance is taken. Genuine reasons like medical concerns will be taken into consideration with proper doctor certification. Attendance will be taken at the beginning of the class and possibly at the end. Canvas is used for attendance and is graded like an assignment. Canvas calculates tardies at 80%.

1–15 minutes late is a tardy, after 15 minutes it is an absence.

Leaving 15 minutes (or less) early is an early departure.

Leaving more than 15 minutes early is an absence.

Any student arriving late/leaving early consistently without a valid reason will be docked a letter grade off their final grade. If you miss a class, it becomes your responsibility to get any notes from a classmate. **Do not ask me.**

Missing class reduces your grade through the following grade reduction policy: You are allowed two excused or unexcused absences. A third absence, unless excused, results in a 15% reduction in your final course grade. More than three absences result in an F in the course. Missing class may also reduce your grade by eliminating opportunities for class participation. For all absences, the student is responsible for all covered materials and assignments.

Only the following are acceptable excuses for absences: death in the immediate family (mother, father, spouse, child, or sibling), hospitalization or serious illness; jury duty; court ordered summons; religious holiday; university/school coordinated athletic or scholastic activities; an unanticipated event that would cause attendance to result in substantial hardship to one's self or immediate family. Absences must be explained with the submission of appropriate documentation to the satisfaction of the instructor, who will decide whether missed work may be made up. Absences that do not satisfy the above criteria are considered unexcused. To protect your privacy, doctor's excuses should exclude the nature of the condition and focus instead on how the condition impacts your attendance and academic performance.

### Incomplete

The instructor may assign an Incomplete (I) grade only if at least 75% of the required coursework has been completed at passing quality and holding you to previously established time limits would result in unjust hardship to you. All unfinished work must be completed by the date set by the instructor. Left unchanged, an Incomplete automatically becomes an F after one year. <http://registrar.iupui.edu/incomp.html> (Links to an external site).

### Deliverables

You are responsible for completing each deliverable (e.g., assignment, quiz) by its deadline and submitting it by the specified method. Deadlines are outlined in the syllabus or in supplementary documents accessible through Canvas. **Should you miss a class, you are still responsible for completing the deliverable and for finding out what was covered in class, including any new or modified deliverable. In fairness to the instructor and students who completed their work on time, a grade on a deliverable shall be reduced 10%, if it is submitted late and a further 10% for each 24-hour period it is submitted after the deadline.**

Projects are due at the beginning of class. If your project is not on my desk at the start of class, 10 points will be immediately deducted. If film is not submitted by end of class the grade will be reduced 25%. An additional 10% will be deducted for each 24-hour period after the deadline.

I will not accept ANY assignments after 1 week following the original due date. Class ends at 5:40, you have until 5:40 the following week to submit a late assignment and still get a small amount of credit.

### Exams/quizzes

- There could be quizzes, surprise and otherwise.
- Quizzes could happen at the beginning of class. There will be no extensions for lateness.
- There will be no grade change unless there is a proof of mathematical miscalculation.

### Class Assignments

There will be 3-4 production assignments.

### Participation

Active participation in every aspect of this course is crucial for your successful completion. Students are expected to participate by answering questions, asking questions and actively discussing topics during lecture. Please realize that your active participation is also crucial for class morale. Class participation refers to the frequency AND quality of your contributions as seen in your presentation of ideas, your contribution to discussions, your enthusiasm to participate with the hands-on aspects of production.

### Grading Information

Attendance and Course Participation	10%
Active Lab Participation	10%
Project #1. Branching Video	15%
Project #2. 360° Stereoscopic Video in Unity	20%
Project #3. Projection Mapping	20%

Project #4. Database Cinema or Immersive Filmmaking	25%
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### **Tentative Schedule**

Week 1	Syllabus Review/ Non-linear video production concepts/ Eko Studio
Week 2	Storyboarding/Non-linear flowchart/ Eko Studio
Week 3	Post-production of assets
Week 4	Uploading/Authoring/Delivery of Project #1
Week 5	360° Video Production Concepts
Week 6	Rendering
Week 7	Graphics with Mettle
Week 8	Delivery of Project #2
Week 9	Projection-Mapping concepts/Millumin/Locations
Week 10	Production
Week 11	Production
Week 12	Delivery of Project #3
Week 13	Database Film Production / Immersive Filmmaking
Week 14	Production
Week 15	Production
Week 16	Deliver Project #4

### **Grading Scale**

97.00 – 100	A+	Professional level work, showing highest level of achievement
93.00 – 96.99	A	Extraordinarily high achievement, quality of work showing command of the subject
90.00 – 92.99	A–	Excellent and thorough knowledge of the subject matter
87.00 – 89.99	B+	Above average understanding of material and quality of work
83.00 – 86.99	B	Mastery and fulfillment of all course requirements; good, acceptable work
80.00 – 82.99	B–	Satisfactory quality of work
77.00 – 79.99	C+	Modestly acceptable performance and quality of work
73.00 – 76.99	C	Minimally acceptable performance and quality of work
70.00 – 72.99	C–	Unacceptable work (Course must be repeated for credit)
67.00 – 69.99	D+	
63.00 – 66.99	D	
60.00 – 62.99	D–	
0.00 – 60.99	F	

No credits toward major, minor, or certificate requirements are granted for a grade below C. Non-majors must satisfy the requirements of their school, which may be lower.

### Instructions for Checking out Equipment:

Room 259 next to the stairs in the NW corner of the building

- Do not wait until the last minute to reserve a camera.
- Make your equipment reservations 24 hours in advance.
- Plan shooting schedules ahead of time to insure availability of the camera gear.
- Review the equipment check-out policies at:

<http://informatics.iupui.edu/technology/policies/equipment.html>

- Check the available equipment at:

<http://informatics.iupui.edu/technology/equipment/> (Links to an external site.)

### Accessing 468 Lab

To get access to 468 you will need to submit an electronic request form from the SOIC website.

To get access to the building after hours is handled by campus police. If you need it talk to technology services about the procedure.

### **CODE OF CONDUCT**

All students should aspire to the highest standards of academic integrity. Using another student's work on an assignment, cheating on a test, not quoting or citing references correctly, or any other form of dishonesty or plagiarism shall result in a grade of zero on the item and possibly an F in the course. Incidences of academic misconduct shall be referred to the Department Chair and repeated violations shall result in dismissal from the program. All students are responsible for reading, understanding, and applying the Code of Student Rights, Responsibilities and Conduct and in particular the section on academic misconduct.

Refer to The Code > Responsibilities > Academic Misconduct at <http://www.indiana.edu/~code/>.

All students must also successfully complete the Indiana University Department of Education "How to Recognize Plagiarism" Tutorial and Test. <https://www.indiana.edu/~istd> You must document the difference between your writing and that of others. Use quotation marks in addition to a citation, page number, and reference whenever writing someone else's words (e.g., following the

Publication Manual of the American Psychological Association). To detect plagiarism instructors apply a range of methods, including Turnitin.com.

<http://www.ulib.iupui.edu/libinfo/turnitin> (Links to an external site.)

### **Academic Misconduct**

1. Cheating: Cheating is considered to be an attempt to use or provide unauthorized assistance, materials, information, or study aids in any form and in any academic exercise or environment.
  - a. A student must not use external assistance on any "in-class" or "take-home" examination, unless the instructor specifically has authorized external assistance. This prohibition includes, but is not limited to, the use of tutors, books, notes, calculators, computers, and wireless communication devices.

- b. A student must not use another person as a substitute in the taking of an examination or quiz, nor allow other persons to conduct research or to prepare work, without advanced authorization from the instructor to whom the work is being submitted.
- c. A student must not use materials from a commercial term paper company, files of papers prepared by other persons, or submit documents found on the Internet.
- d. A student must not collaborate with other persons on a particular project and submit a copy of a written report that is represented explicitly or implicitly as the student's individual work.
- e. A student must not use any unauthorized assistance in a laboratory, at a computer terminal, or on fieldwork.
- f. A student must not steal examinations or other course materials, including but not limited to, physical copies and photographic or electronic images.
- g. A student must not submit substantial portions of the same academic work for credit or honors more than once without permission of the instructor or program to whom the work is being submitted.**

**[The outcomes and artifacts developed for any one class in Media Arts and Sciences at IUPUI cannot be the same or overly similar between semesters or in the same semester for one student or group of students or one faculty or group of faculty. The project must be differentiated, the expectations for the project outlined, and the faculty involved, notified and in agreement prior to the semester beginning.]**

- h. A student must not, without authorization, alter a grade or score in any way, nor alter answers on a returned exam or assignment for credit.
2. Fabrication: A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citation to the sources of information.
  3. Plagiarism: Plagiarism is defined as presenting someone else's work, including the work of other students, as one's own. Any ideas or materials taken from another source for either written or oral use must be fully acknowledged, unless the information is common knowledge. What is considered "common knowledge" may differ from course to course.
    - a. A student must not adopt or reproduce ideas, opinions, theories, formulas, graphics, or pictures of another person without acknowledgment.
    - b. A student must give credit to the originality of others and acknowledge indebtedness whenever:<sup>[[SEP]]</sup>
      1. directly quoting another person's actual words, whether oral or written;
      2. using another person's ideas, opinions, or theories;
      3. paraphrasing the words, ideas, opinions, or theories of others, whether oral or written;
      4. borrowing facts, statistics, or illustrative material; or
      5. offering materials assembled or collected by others in the form of projects or collections without acknowledgment
  4. Interference:<sup>[[SEP]]</sup>A student must not steal, change, destroy, or impede another student's work, nor should the student unjustly attempt, through a bribe, a promise of favors or threats, to affect any student's grade or the evaluation of academic performance. Impeding another student's work includes, but is not limited to, the theft, defacement, or mutilation of resources so as to

deprive others of the information they contain.

5. **Violation of Course Rules:** A student must not violate course rules established by a department, the course syllabus, verbal or written instructions, or the course materials that are rationally related to the content of the course or to the enhancement of the learning process in the course.
6. **Facilitating Academic Dishonesty:** A student must not intentionally or knowingly help or attempt to help another student to commit an act of academic misconduct, nor allow another student to use his or her work or resources to commit an act of misconduct.

## **OTHER POLICIES**

1. **Administrative withdrawal:** A basic requirement of this course is that students participate in all class discussions and conscientiously complete all required course activities and/or assignments. If a student is unable to attend, participate in, or complete an assignment on time, it is the student's responsibility to inform the instructor. If a student misses more than half of the required activities within the first 25% of the course without contacting the instructor, the student may be administratively withdrawn from this course. Administrative withdrawal may have academic, financial, and financial aid implications. Administrative withdrawal will take place after the full refund period, and a student who has been administratively withdrawn from a course is ineligible for a tuition refund. Contact the instructor with questions concerning administrative withdrawal.
2. **Civility:** To maintain an effective and inclusive learning environment, it is important to be an attentive and respectful participant in lectures, discussions, group work, and other classroom exercises. Thus, unnecessary disruptions should be avoided, such as ringing cell phones, engagement in private conversations, and other unrelated activities. Cell phones, media players, or any noisy devices should be turned off during a class. Texting, surfing the Internet, and posting to Facebook or Twitter during class are generally not permitted. Laptop use may be permitted if it is used for taking notes or conducting class activities. Students should check with the instructor about permissible devices in class. IUPUI nurtures and promotes "a campus climate that seeks, values, and cultivates diversity in all of its forms and that provides conditions necessary for all campus community members to feel welcomed, supported, included, and valued" (IUPUI Strategic Initiative 9). IUPUI prohibits "discrimination against anyone for reasons of race, color, religion, national origin, sex, sexual orientation, marital status, age, disability, or veteran status" (Office of Equal Opportunity). Profanity or derogatory comments about the instructor, fellow students, invited speakers or other classroom visitors, or any members of the campus community shall not be tolerated. A violation of this rule shall result in a warning and, if the offense continues, possible disciplinary action.
3. **Communication:** For classroom-based courses, the instructor or teaching assistant should respond to emails by the end of the next class or, for online courses, within two Indiana University working days, which excludes weekends and holidays. The instructor should provide weekly office hours or accept appointments for face-to-face, telephone, or teleconferenced meetings, and announce periods of extended absence in advance.
4. **Counseling and Psychological Services (CAPS):** Students seeking counseling or other psychological services should contact the CAPS office by phone at 274-2548 or email at [capsindy@iupui.edu](mailto:capsindy@iupui.edu). For more information visit <http://life.iupui.edu/caps/>.

5. **Course evaluations:** Course evaluations provide vital information for improving the quality of courses and programs. Students are urged to complete one course and instructor evaluation for each section in which they are enrolled at the School of Informatics and Computing with the following three exceptions: (a) The student has withdrawn from the course; (b) fewer than five students are enrolled in the section (in which case maintaining anonymity is difficult); and (c) the section is a laboratory that must be taken with a course having a different section number. Course evaluations are completed at <https://soic.iupui.edu/app/course-eval/>. Course evaluations are typically open from the eleventh week. Course evaluations are anonymous, which means that no one can view the name of the student completing the evaluation. In addition, no one can view the evaluation itself until after the instructor has submitted the final grades for the course. In small sections, demographic information should be left blank, if it could be used to identify the student.
6. **Disabilities policy:** In compliance with the Americans with Disabilities Act (ADA), all qualified students enrolled in this course are entitled to reasonable accommodations. Please notify the instructor during the first week of class of accommodations needed for the course. Students requiring accommodations because of a disability must register with Adaptive Educational Services (AES) and complete the appropriate AES-issued before receiving accommodations. The AES office is located at UC 100, Taylor Hall (Email: [aes@iupui.edu](mailto:aes@iupui.edu), Tel. 317 274-3241). Visit <http://aes.iupui.edu> for more information.
7. **Email:** Indiana University uses your IU email account as an official means of communication, and students should check it daily for pertinent information. Although you may have your IU email forwarded to an outside email account, please email faculty and staff from your IU email account.
8. **Emergency preparedness:** Safety on campus is everyone's responsibility. Know what to do in an emergency so that you can protect yourself and others. For specific information, visit the emergency management website. <http://protect.iu.edu/emergency>
9. **IUPUI course policies:** A number of campus policies governing IUPUI courses may be found at the following link: [http://registrar.iupui.edu/course\\_policies.html](http://registrar.iupui.edu/course_policies.html)
10. **No class attendance without official enrollment.** Only those who are officially enrolled in this course may attend class unless they are enrolled as an auditor or making up an Incomplete by prior arrangement with the instructor. This policy does not apply to those assisting a student with a documented disability, serving in an instructional role, or administrative personnel. <http://registrar.iupui.edu/official-enrollment-class-attendance.html> Children may *not* attend class with their parents, guardians, or childcare providers.
11. **Religious holidays:** Students seeking accommodation for religious observances must submit a request form to the course instructor by the end of the second week of the semester. For information visit <http://registrar.iupui.edu/religious.html>.
12. **Right to revise:** The instructor reserves the right to make changes to this syllabus as necessary and, in such an event, will notify students of the changes immediately.
13. **Sexual misconduct:** IU does not tolerate sexual harassment or violence. For more information and resources, visit <http://stopsexualviolence.iu.edu/>.
14. **Student advocate:** The Student Advocate provides assistance to students with personal, financial, and academic issues. The Student Advocate Office is located in the Campus Center,

Suite 350. The Student Advocate may also be contacted by phone at 317 274-4431 or by email at [studvoc@iupui.edu](mailto:studvoc@iupui.edu). For more information visit <http://studentaffairs.iupui.edu/advocate>.

### **MISSION STATEMENT**

The Mission of IUPUI is to provide for its constituents excellence in

- Teaching and Learning;
- Research, Scholarship, and Creative Activity; and
- Civic Engagement.

With each of these core activities characterized by

- Collaboration within and across disciplines and with the community;
- A commitment to ensuring diversity; and
- Pursuit of best practices.

IUPUI's mission is derived from and aligned with the principal components— Communities of Learning, Responsibilities of Excellence, Accountability and Best Practices—of Indiana University's Strategic Directions Charter.

### **STATEMENT OF VALUES**

IUPUI values the commitment of students to learning; of faculty to the highest standards of teaching, scholarship, and service; and of staff to the highest standards of service. IUPUI recognizes students as partners in learning. IUPUI values the opportunities afforded by its location in Indiana's capital city and is committed to serving the needs of its community. Thus, IUPUI students, faculty, and staff are involved in the community; both to provide educational programs and patient care and to apply learning to community needs through service. As a leader in fostering collaborative relationships, IUPUI values collegiality, cooperation, creativity, innovation, and entrepreneurship as well as honesty, integrity, and support for open inquiry and dissemination of findings. IUPUI is committed to the personal and professional development of its students, faculty, and staff and to continuous improvement of its programs and services.