

 FLORIDA ATLANTIC UNIVERSITY	COURSE CHANGE REQUEST Undergraduate Programs	UUPC Approval <u>2/26/24</u> UFS Approval _____ SCNS Submittal _____ Confirmed _____ Banner Posted _____ Catalog _____
	Department SCMS College Arts and Letters	

Current Course Prefix and Number MMC 3711	Current Course Title Interactive Multimedia
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Syllabus must be attached for ANY changes to current course details. See Template. Please consult and list departments that may be affected by the changes; attach documentation.

Change title to: Interactive Digital Media Change prefix From: _____ To: _____ Change course number From: _____ To: _____ Change credits* From: _____ To: _____ Change grading From: _____ To: _____ Change WAC/Gordon Rule status** Add <input type="checkbox"/> Remove <input type="checkbox"/> Change General Education Requirements*** Add <input type="checkbox"/> Remove <input type="checkbox"/> <small>*See <u>Definition of a Credit Hour</u>.</small> <small>**WAC/Gordon Rule criteria must be indicated in syllabus and approval attached to this form. See <u>WAC Guidelines</u>.</small> <small>***GE criteria must be indicated in syllabus and approval attached to this form. See <u>Intellectual Foundations Guidelines</u>.</small>	Change description to: Change prerequisites/minimum grades to: Change corequisites to: Change registration controls to: Please list existing and new pre/corequisites, specify AND or OR and include minimum passing grade (default is D-).
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Effective Term/Year for Changes: Fall 2024	Terminate course? Effective Term/Year for Termination:
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Faculty Contact/Email/Phone Christopher Robe <crobe@fau.edu>

Approved by Department Chair <u>CB Nulls</u> College Curriculum Chair <u>Erin Henge</u> College Dean _____ UUPC Chair <u>Korey Sorge</u> Undergraduate Studies Dean <u>Dan Meeroff</u> UFS President _____ Provost _____	Date <u>1/26/2024</u> <u>5 FEB/2024</u> <u>2/8/24</u> <u>2/26/24</u> <u>2/26/24</u> _____ _____
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Email this form and syllabus to mjenning@fau.edu seven business days before the UUPC meeting.

S Y L L A B U S

CATALOG DESCRIPTION:

MMC 3711: INTERACTIVE DIGITAL MEDIA (4 Cr. Hr): An introduction to the basics of interactive digital media production. Class projects explore the potential of interactive media to communicate, express and challenge cultural ideas. The course seeks to develop a combination of critical, technical and design skills.

COURSE DESCRIPTION:

This course explores the intersection of expressive and communicative media with technology, as well as the new aesthetics and practices that are emerging around user interaction. Through collaboration and experimental production, the class will examine interactive media and culture from the perspective of hybrid processes and structures, often expanding our notions of performance, installation, intervention, and presentation.

LEARNING OBJECTIVES:

The class objective is to develop your own approach to create work that combines still/motion imagery, sound/music, and text in networked, interactive, and immersive environments.

Throughout this course you will:

- expand and consolidate your visual and sonic design skills as applied to interactive digital media, and create projects that demonstrate your understanding of multiple media production
- become proficient in coding (p5js/Processing) and visual programming (PureData/ Automatonism)
- become more familiar with new, emerging developments in digital media /digital culture, and discuss these developments in web posts, and identify area of interest in the domain visual, sonic, immersive, interactive, exhibitional, or performative production.
- document your work in a responsive website showcasing all you’ve done for this course.
- present your final project in class, and possibly to a larger live or virtual audience (TBD).

Note to Graduate Students (if course is cross-listed) – Graduates will be expected to produce with a deeper level of understanding, and accomplishment (i.e., technical skills, aesthetic perspectives, etc.), as is appropriate for graduate candidates. They are expected to explore in their projects connections to their own research interests and (potentially) their thesis projects. And as a “teaching lab” opportunity, each grad will give a mini-lecture on their research interests/thesis project and possible connection to interactive media (including software of choice).

INSTRUCTIONAL METHOD (MODALITY): In-Person, unless conditions change (see Covid Policy below).

COURSE EVALUATION METHOD

1. Visual Frameworks: Compositions/Sketchbook (p5js) plus response to material.	20%
2. Sonic Frameworks: Compositions/Sketchbook (PureData) plus response to material.	20%
3. Verbal/Conceptual Frameworks: Experimental Text Object + response to material	15%
4. Immersive Frameworks and AI/BD/ML Horizons (response to material)	5%
Final Project	30%
Attendance	<u>10%</u>
Total	100%

Assignment grades are based on the quality of work and timeliness of assignment submission, and you’re responsible for keeping on top of upcoming due dates. All projects need to be finished and **SUBMITTED VIA THE CANVAS SITE** by the due date and time. If you are LATE, 5% is taken off your assignment grade. The assignment will remain open for ONE WEEK (grace period), during which time you’ll be given a temporary placeholder score. If you don’t submit your assignment within the grace period, the placeholder score becomes permanent (you’ll still need to complete and submit the assignment via email). **I don’t re-open an assignment after the week grace period, and you can’t re-submit an assignment for a better grade.**

While this is sort of assumed, I will say it anyway: **IF YOU DON’T TURN IN ANY WORK, YOU WILL FAIL.**

ATTENDANCE POLICY/INSTRUCTION METHOD

This class is designated as "In-Person." You are expected to attend all classes for the full duration of the class. *If the modality of the course changes during the semester, you will be expected to attend (virtually) all (synchronous) classes for the full duration of each class.* This policy should be understood to include university policy, as stated in relevant Provost's memoranda, at <https://www.fau.edu/provost/documents/religious-accommodations-students-and-faculty-8-21-15.pdf> and <https://www.fau.edu/provost/documents/policy-student-absences-revised-8-21-15.pdf>.

Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance. Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

Your attendance counts for 10% of your grade. Canvas Designations:

Green: On-time, stay for full class, per class:	100%
Amber: Arrive late or leave early (20+ minutes)	- 20% (unless excused)
Red: Absent	0% (unless excused)

COVID – 19 POLICY

Students experiencing flu-like symptoms (fever, cough, shortness of breath), or students who have come in contact with confirmed positive cases of COVID-19, should immediately contact **FAU Student Health Services (561-297-3512)**. Symptomatic students will be asked to leave the classroom to support the safety and protection of the university community. For additional information visit <https://www.fau.edu/ehs/safety/public-health-program/>. In classes with face-to-face components, quarantined or isolated students should notify me immediately as you will not be able to attend class. I will make reasonable efforts to assist students in making up the work. Vaccinated students have much lower chances of needing to quarantine and a much lower chance of missing class time.

Counseling and Psychological Services (CAPS) Center

Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services – individual counseling, support meetings, and psychiatric services, to name a few – offered to help improve and maintain emotional well-being. For more information, go to <https://www.fau.edu/counseling/>.

Disability Policy

In compliance with the Americans with Disabilities Act Amendments Act (ADAAA), students who require reasonable accommodations due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For more information, please visit the SAS website at <https://www.fau.edu/sas/>.

Code of Academic Integrity

Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see **University Regulation 4.001**.

Issues & Concerns

If you have any issues or concerns about the course that I have not addressed, you may contact **Dr. Carol Bishop Mills, Director of the School of Communication and Multimedia Studies** at millsc@fau.edu.

Grade Scheme, Evaluation/Performance Criteria

A (94-100)	EXCEEDS Expectations in ALL areas. <i>Conceptual:</i> Concepts engaging, thorough, related to class theme/topic, and coherent; Original thinking, moves beyond assignment bounds, experiments, takes work to a high level; <i>Verbal (posts/reviews/essays):</i> Well organized and well written, clear, direct language. Carefully proofread and no major errors in grammar, spelling, or punctuation.
A- (90-93)	<i>Design:</i> Well thought through design, innovative, inventive, consistent design elements; <i>Sound (when used):</i> Content compelling and interesting, good production values, submitted in requested file formats and naming convention. <i>Other Production/Presentation:</i> Careful attention to detail, 100% complete, technically superior, no errors in spelling, compression, graphics, presentation, stays within exercise limits; submits assignment in the manner requested by professor (i.e. posts to web and other assignments turned in via Canvas before due date/time), and exceeds goals of exercise.
B+ (87-89)	MEETS Expectations, above average. <i>Conceptual:</i> Complete assignments with originality, related to class theme/topic; <i>Verbal (posts/reviews/essays):</i> Writing and organization is acceptable, but could be improved. Some errors in grammar, spelling, or punctuation. <i>Design:</i> Mostly clear design, but some elements that could be improved; <i>Sound (when used):</i> Content interesting, production values acceptable but could be improved, submitted in acceptable file formats, naming convention not used or inconsistent. <i>Other Production/Presentation:</i> Shows technical knowledge, but may have one or two technical glitches, meets goals of exercise, stays within exercise limits; EITHER submits assignment with some technical issue (broken URL, site not working, wrong file extension/no file extension, naming convention not followed) AND/OR not submitted by due date and time.
B (84-86)	
B- (80-83)	
C+ (77-79)	SATISFACTORY, average. <i>Conceptual:</i> Not very original or unchallenging thinking, only somewhat related to class theme/topic; <i>Verbal (posts/reviews/essays):</i> Not written with clarity, not carefully organized. Errors in grammar, spelling, and punctuation.
C (74-76)	<i>Design:</i> Inconsistencies in design, lack of attention to detail; <i>Sound (when used):</i> Content not very interesting or relies too heavily on simple repetition, production values low, submitted in unacceptable file formats, naming convention not used or inconsistent.
C- (70-73)	Does not follow assignment guidelines or shows a misunderstanding of basic terms of sound used in assignment. <i>Other Production/Presentation:</i> lack of thoroughness, does not meet goals of exercise, structural and technical problems. Assignment submitted with one or more technical issues, and/or not submitted by due date/time.
D+ (67-69)	Falls below expectations in most categories. Minimal effort expended on the work.
D (64 – 66)	
D- (60 – 63)	
F (59 – less)	Fails to meet requirements of Assignment.

*All work turned in for this class *must be created for this class alone* (unless you also are currently enrolled or were enrolled in my other classes, in which case you can use your web hosting assignments in this class.)

No assignments from previous courses accepted, and “joint” assignments completed for more than one class are not acceptable unless prior *written* arrangements are made between the student and *both* professors involved. *Failure to comply with this expectation will result in a failing grade.*

COURSE SCHEDULE OVERVIEW

Note: *I organize this course according to what I call “frameworks” (Visual, Sonic, Textual, Immersive/Conceptual). It might just be another way of describing “perspectives” or “operating principles” or “aesthetics, structures, forms/genres” associated with the given media type (visual media, sonic media, text-based media). Or, “modes of perception when dealing with a particular media type.”*

WEEK 1	Aug 23	0. Introductions
		1. Visual Frameworks (p5js) Introduction, basic structure, syntax, and interface. Static sketch and beginning dynamic (interactive) sketches. Doing Day 1 Sketches in class (MonkeyBear & Variations)
WEEK II	Aug 30	Drawing primitives, working with mouse events, and random variables—the paintbrush sketch. <i>p5js Day 1 Sketches Due</i>
WEEK III	Sept 6	Keypress events to control random primitives. Iteration function, multiple canvases <i>p5js Day 2 Sketches Due</i>
WEEK IV	Sept 13	The Page-Turner Framework • Loading media in p5 • Animations using iteration functions. <i>p5js Day 3 Sketches Due</i>
	Sept 19	<i>Responses to Visual Frameworks Due</i>
WEEK V	Sept 20	2. Sonic Frameworks (PureData) PureData (Procedural Audio): Introduction, interface, workflow • Building Synthesizers
WEEK VI	Sept 27	Building Sequencer, working with Audio files; the Recording Utility <i>Synthesizers Due</i> <i>p5js Day 4 Sketch Due</i>
WEEK VII	Oct 4	Sampler & Interface Elements (sub-patches, send/receive objects, and abstractions); MIDI <i>Sequencer & Recorder Utility Due</i>
WEEK VIII	Oct 11	PureData Gone Modular & Abstracted: the world of Automatonism
WEEK IX	Oct 18	More on Automatonism
	Oct 24	<i>Final PureData/Automatonism Project Due • Response for Sonic Frameworks due</i>
WEEK X	Oct 25	3. Textual Frameworks a. Hypertext: HTML/Ink/Twine

		<i>Formulate ideas about your final project—be ready to present in next class</i>
WEEK XI	Nov 1	b. Flarf Poetry & Destabilized Text with Google Search, MS Word, Botnik, ChatGPT, etc. <i>Discuss Final Project ideas</i>
	Nov 7	<i>Response on Exploring the Poetics of Technology and One Flarf Poem plus Recipe due</i>
WEEK XII	Nov 8	4. Immersive/Conceptual Frameworks, Emerging Horizons Idea vs. Narrative + Space vs. Sequence a. Extending p5js (Arrays, Sound, XML);
WEEK XIII	Nov 15	b. Live Coding with Hydra and Live Sonics with Automatism (Demo) c. Processing – videoJam App (Demo) Adding audio and live video with Libraries
	Nov 22-26	<i>Thanksgiving Break — No Classes Held</i>
WEEK XIV	Nov 29	Studio Day: Revisiting Your Final Project • more resources at Generative Design, OpenProcessing, etc. <i>Response for Immersive/Conceptual Frameworks Due</i>
	Dec 4 - 6	<i>Reading Days — Make-up days, otherwise no class (but Labs will be available). Catch Up on All Projects.</i>
FINALS	Dec 13	SHOWTIME: PRESENT FINAL PROJECTS • Final Project Due
<i>ALL WORK MUST BE COMPLETED & SUBMITTED</i>		

The course is divided into four “units” each examining one media area:

1. **Visual Frameworks** (green— Aug 23 – Sept 13), 4 classes
2. **Sonic Frameworks** (blue—Sept 20 – Oct 18), 5 classes
3. **Verbal/Conceptual Frameworks** (yellow-ochre—Oct 25 – Nov 1), 2 classes
4. **Immersive Frameworks and AI/BD/ML Horizons** (red —Nov 8 – Nov 29) 3 classes

In each unit you’re given a lot of information as “INPUT”: mostly videos and online articles. You’ll also be expected to finish the “sketches” of one to five examples of media created in each unit.

At the end of each unit, you’ll write an essay drawing examples from all this material to underscore your points (“OUTPUT”). The best way to do this is to let the works and artists that “spoke” to you most clearly be your guide. Respond to the material that most impacted you, that gave you pause or stopped you to re-evaluate your previous perspectives on each topic.

Your essay will be about 400 words (undergrad) or 800 words (graduate), and you’ll post it on your site and submit it via canvas. But, you can’t really do that until you make your way through all the material, and we will discuss and consider a few of the examples each week—how we discuss each one and the conversations we have about the articles, works, and artists can also be referenced in your essay.

Specific examples in the ‘Input’ sections below appear as live links on the course Canvas site.

SUCCESS IN THIS COURSE

Here’s a few items to keep in mind—they will all contribute to your success in this course:

- 1) **Canvas Site - First, check the Canvas site every day** for upcoming assignments and deadlines. You will sign in with your FAU login and password at <https://canvas.fau.edu>. Since Canvas is FAU’s LMS (learning management system, **you must submit ALL your assignments via Canvas**. If the assignment submission is locked, you can email me your assignment via Canvas, or by regular email (jbargste@fau.edu), but *please* try to submit via Canvas first. For help with Canvas, check out the [Canvas Student Guide](#).
- 2) **Homework/Additional Time:** For optimal performance in this course, **you will probably need to spend 10-12 additional hours per week on average to watch the assigned videos, read assigned materials, and produce your assignments in other labs or at home**. And please try to get notes from other students or check out the [archive of class videos](#) if you miss a class—it’s really easy to get behind especially when we’re dealing with production techniques.
- 3) **Hardware: Most work must be done on either a laptop or a workstation or desktop computer—Atom, Processing, and PureData don’t run on tablets or smartphones.** P5.js can run in a browser, so you can use that in the early part of the course.

As the class meets in person (in FAU-BCC 918 lab on the Ft. Lauderdale Campus), you may bring your own laptop to class as long as you have compatible software (*see below*)—HOWEVER, be aware that I’m not going to be your personal technical support if your laptop starts acting up. If you’re having trouble during class time, USE THE LAB DESKTOP instead of calling FAU Helpdesk, where you will be put on hold, miss the lecture or tutorial, and disrupt the class when you have tech support on the line! (*More caveats under **Backing Up Your Work***). During the break, you can contact FAU Helpdesk at <https://helpdesk.fau.edu/TDClient/Home/>, or call 561-297-3999.

The FAU-BCC 918 lab is Mac-based, and if you haven't worked on a Mac before I recommend you become 'bi-lingual'. If you haven't worked on a Mac before, it's suggested you learn during this course *so you can mention 'fluency with Windows/Mac operating systems' on your resume!* Go to the Resources Page in Canvas for Tutorials.

4) Software: Once you've been introduced to any particular production software, get familiar with it, get comfortable with its interface, workflow, and associated file types. Most of the tutorials on Canvas are clear and direct; additional links to online materials (YouTube, Linda.com, Digital Tutors, W3Schools, etc.) usually included.

I design my courses around free software because you'll probably do most of your work at home on your laptop. **You can use all free software for this course: VisualStudio Code/Google WebDesigner/Wordpress, Cyberduck; Processing, p5.js, Hydra; and PureData/Automatonism.**

5) Backing Up Your Work: You are **REQUIRED** to create and use your FAU OneDrive account (free) for this course. You have no excuse for always having your latest version of your work accessible via cloud software! Other cloud-based backup services like Google Drive, DropBox, and iCloud are also acceptable.

Using your own laptop doesn't mean you don't have to back up your work to your OneDrive! If your computer or drives get lost or stolen, or your computer crashes and can't be recovered, you DO NOT get any extension of your due dates. Thumb drives and smartphones are not recommended for backups (although they can be useful for moving around big files). **Drives crash and data does get lost—don't risk it by having just one copy of your work!**

To use your FAU OneDrive, go to <https://fau-my.sharepoint.com/>, select your FAU account. Synchronize your local drive with your online storage at the end of each class 10 minutes or so before the end of each class.

Highly Recommended: If you want additional industrial-strength redundancy, back up your entire home computer to an external hard drive. I recommend you use Time Machine if you're Mac-based and on Windows 10/11 go to Windows > Settings > Update & Security > Backup. But, also back up your files for this course to your OneDrive!

6) FAU Ft. LAUDERDALE LABS, Rooms 914, 918, and others: During the first two weeks of classes, you'll receive a lab schedule with all the available labs on the Ft. Lauderdale campus. If you haven't worked on a Mac before, use this course as an opportunity to learn the Mac operating system. Many future employers/collaborators/clients use both operating systems. Tutorials for adjusting to a Mac are linked on the Resources page.

ASSIGNMENTS (More detail on assignments on Canvas site)

Website

Your website is the central portal to your work in this course. It's how I can examine not only your progress, but your interests in digital media and digital culture. You'll create a site specific to this course and update it throughout the course with your responses to the material and examples of your projects. You can host your site yourself using a templated design provided on the Canvas site, or you can use a content management system (CMS) to build your site (i.e., Wordpress, Wix, or Squarespace). **While I won't be grading your website as an assignment, I will reduce your score on your four Responses To ___ Frameworks by 10% for each response that is not submitted as a URL to your site** (i.e., you need to build a website for this class, at least a very simple free Wordpress or Wix site; don't need a domain or any sort of paid-monthly site).

1 –P5JS Sketchbook. As this is an introduction to coding and interactivity using p5js, we will be setting the stage for your work with similar tools in other courses. After learning the basics of syntax and structure in p5js, we will go on to investigate interaction and integration with images, video, audio, and text.

At the end of the p5js module, you'll post screenshots of all your work to your site, along with your reflections on working with p5js. All your sketches will be submitted to the Canvas site and linked to your site.

2 –PureData Sketchbook. These exercises are designed to help you expand your approach to integrating sound into your interactive digital media, by working with procedural audio. After a quick overview of sound terminology and structure, we will start by building two basic sound "instruments"—synthesizers and a sequencer—from scratch, using the graphical programming language PureData. These will be submitted via Canvas. Your final project will be created in Automatonism. You'll post screenshots of your work to your site, along with your reflections on working with procedural audio in general and PureData in particular.

3—Text Object. After introducing several methods for using text as "digital artistic material," you'll create a short "text object," an unstable, open verse text (i.e., "Flarf poem"). You'll document your "recipe" for creating it and discuss your process on your website, along with your response to the textual/conceptual material. You'll zip and submit any project files on Canvas and a link to the project (if applicable).

4—Immersive Frameworks & AI/BD/ML Horizons. After examining several software platforms (Processing, Hydra, Automatonism, vvvv, Vuo, Unity, and online tools), and multiple examples of projects built on these platforms in class, you'll respond to the "INPUTS" material in a discussion on your website.

Final Project. You'll discuss in class and document in a Canvas discussion your ideas for a final interactive digital media project. It should be an extended project built in one (or possibly more than one) of the software platforms we've studied over the semester. More guidelines on the specifics of the Final Project will be available on Canvas.

RECOMMENDED TEXTS

These texts are not required, but can substantially amplify your responses to the material (bold);

- **Getting Started with p5.js** [paperback], Lauren McCarthy, Casey Reas, and Ben Fry (\$19.99). The authoritative book on p5.js, the browser-based version of Processing.
- *Learning Processing* [paperback], Daniel Shiffman (\$19.24). A good basic reference for Processing.
- *Processing: A Programming Handbook for Visual Designers and Artists*, Casey Reas and Ben Fry (MIT Press: 2007). Another good resource for Processing by the two guys who created it.
- **Designing Sound** [hardcover], Andy Farnell (\$48.18). Really comprehensive immersion into PureData and sound design. Fantastic book! Condensed version of essentials from the book available via link on the Canvas site.

For diving deeper into the topics (supplemental; also not required):

- *The Nature of Code* [print, e-pub, online], Daniel Shiffman (free reading and example code online, download .pdf or e-book with a donation, \$26.95 for the print edition on Amazon). Amazing book on creating code that simulates natural systems—i.e., lots of math and physics—but accessible.
- *Generative Design: Visualize, Program, and Create with Processing* [hardcover], Hartmut Bohnacker, et al., \$62, but you can probably find it used on Amazon for around \$20 plus shipping. Really amazing coffee-table book of Processing examples, all of which you can download for free at <http://www.generative-gestaltung.de/code>. Two editions, either will do.



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