AUDIO DESIGN AND DIGITAL PRODUCTION

INSTRUCTOR: Tim Difato	**CLASS LOCATION***:* T NRG 205; TH 0120
SEMESTER/YEAR: FALL 2018	**CLASS MEETING TIME(S)***:* T, P 5 – 6; TR, P 6
Office location/Hours: T & TH 5 – 6 PM	**Contact phone:** (352) 294-2000
Credit Hours: 3.0	**COURSE NUMBER:** DIG4255C
CONTACT EMAIL: TIM@DIGITALWORLDS.UFL.EDU	**COURSE COMMUNICATION:** UF E-LEARNING

COURSE DESCRIPTION

This course introduces students to professional techniques for the creation of audio content for variety of applications in the digital arts and sciences. Students will learn about software tools for conversion, storing, processing and retrieval of sound in a variety of digital formats. Students will become familiar with fundamentals of loop-based audio design, sampling, and working with an industry standard software with linear and interactive digital media.

PREREQUISITE KNOWLEDGE AND SKILLS

Junior-level DAS major or instructor permission

PURPOSE OF COURSE

The purpose of this course to is give students a well-rounded understanding of Audio Design and Production Techniques.

COURSE GOALS AND/OR OBJECTIVES

By the end of this course, students will be able to:

1. Articulate the history, technology and key terms of the audio industry.
2. Demonstrate proficiency using professional audio and sequencing software. (Pro Tools, Ableton)
3. Demonstrate a solid technical understanding of sound recording and processing.
4. Set up and operate an audio board and produce a full mix.
5. Communicate the impact of sound design with film. (Foley, 5.1 Mix, etc.)

COURSE SCHEDULE:

This 15-week course will have multiple assessments built-in, along with real world projects to allow students to develop mastery of the course material. The course will conclude with a final project and final exam which will show your practical knowledge of the various production techniques, as well as a mastery of the theoretical content. The final exam time for this course may differ from our normal class meeting time.

The final exam time scheduled for this course will be announced in advance of each semester by the University of Florida Registrar's Office at http://www.registrar.ufl.edu/soc/

DIG4255C – Audio Design & Digital Production

Week	Topic	Assignments/Quizzes
1 8/23 8/25	• How to listen? o Listening exercise • What is sound? • How does sound affect us? • Sound Media Relationships • Psychoacoustics • Overview of class. • Syllabus • iLok Student Verification • Setting up Pro Tools, • iLok install	HW: Due next week 2nd class 1. Send iLok Verification 2. Purchase Pro Tools Software, 3. **Discussion Forum 1:** 1 Paragraph and respond to at least 2 other student's comments exploring "Ways Sound Affects Us TED Talk." Give thoughtful responses.
2 8/30 9/1	History of Sound Production/Recording: • Phonograph • Recording to disc • Analog • Digital • MIDI • Etc. The Tools of Audio Engineering: General overview: • Mixer • Amplifier • Transducer o Speakers o Microphone	HW: Due next week 2nd class • Lynda: Watch Pro Tools 1 • Listening Assignment 1 o Take at least 30 good minutes and listen/document 5 sounds and 2 songs. o Pick sounds and songs that are different from each other. o Try to break apart the sound and songs and identify the items that make them. o Share your documentation in the **Discussion Forum 2** and comment on **at least 2** other students posts. Give thoughtful responses. o If you can, share the items you listened to through a web link if they are found on the internet.
3 9/6	DAW Pro Tools 1 - Intro • Interface	HW: Due next week 2nd class • Pro Tools Assignment 1 – Setup a session. Pick a multi provided and setup the session. • Mix Down 1: Rough Track

9/8	• Navigation • Arming a track, etc. • Click track o Bars/Beats/Measures Mixing Console Intensive • Trim/Gain, • EQ • Auxiliary/FX sends • Bussing • Mute/Solo/Pan	• Bounce Track • Provide constructive feedback to 2 other student's submitted work. • **Quiz 1**
4 9/13 9/15	Microphones Intensive: • Microphones Styles • Types • Polar Patterns, • Phantom Power, • Pre-amps, Pro Tools 2 – Virtual Console and Filters	HW: Due next week 2nd class Pro Tools Assignment 2 – Mix Down 2 • Introduce a full mix of your multi • Use Panning, Levels, Gain, EQ, etc. • Bounce Track • Provide constructive feedback to 2 other student's submitted work.
5 9/20 9/22	Studio Recording/ Production: • Setup the Studio • DAC • DAW • DAI • Snake/Patch Bays, • Acoustics • Recording Vocals	HW: • **Quiz 2**

6
 	
9/27
 	
9/29
	Studio Recording/ Production:
	• DI Box
	• Monitoring
	• Instruments in the studio
	
	Pro Tools Session:
	• Basic editing tools to trim
		HW: Due next week 2nd class
		Pro Tools Assignment 3: Track Live Vocals
		• Group Assignment:
		    o On Campus: Record your VO
		    o Online: Mix down the VO
		    o Provide constructive feedback to 2 other group's submitted work.

7 10/4	**Mid-Term Exam –** • **On Campus: In Class (1 Hour)** • **Online: OYOT (1 Hour)**	
10/6	Audio MIDI Recording • VST • Setting up MIDI • Tracking Keys/Interfaces • Quantize	

8
10/11
	Audio Post Production:
	• Editing your session
	• Editing your samples
	    o Working with Regions
	    o Selection Tool, Trim Tool, Hand Tool/Grab Tool
	    o Looping
	• Automation
	    o Volume
	
	• Cross Fade
	• Normalizing a track
		HW: Due next week 2nd class
		• Pro Tools Assignment 4: Midi Assignment
		    o Provide constructive feedback to 2 other student's submitted work.

	(10/13 in left column)	

9
10/18
	Audio Post Production:
	• Compression
	• Gating
	• Limiting
	• FX (Delay and Reverb)
	
	Mastering
	• Setting up Groups, Bus
	• Bouncing your Final
		HW: Due next week 2nd class
		• Pro Tools Assignment 5: Edit your Multi down
		    o Trim down multi and bounce final using compression, gating, limiting, FX, etc.
		    o Provide constructive feedback to 2 other student's submitted work.

	(10/20 in left column)	
10 10/25	Uses of Live Audio Sequencing: • What is Sequencing • Uses of Ableton • Setup Ableton 1-month trial	HW: Due next week 2nd class • Setup Ableton Trial

DIG4255C – Audio Design & Digital Production

10/27	• Learn the UI • Setting up DAI • Samples • Loops • Beats • Adding Effects	

11
 	
11/1
 	
11/3
	Ableton live performance with VST/AU
	• Setting up VST in Ableton
	• Arming the Track
	• Setting up MIDI Instrument
		HW:
		• **Quiz 3**
		• Ableton Assignment 1 *(Due next week 2nd class)*
		   o Setup your session with Samples and Loops
		   o Provide constructive feedback to 2 other student's submitted work.

12 11/8 11/10	Ableton in Live Shows • Routing Ableton to trigger for live show audio and scenes Audio Design for Film • Scores (Sound Tracks) • Foley (Samples/Sound Effects)	

13
 	
11/15
 	
11/17
	Audio Design for Film
	
	• Using Sound for Storytelling
	• Using your Space/Environment
	• Understanding your sound
	• Recording your samples
	   o How
	   o With what
	   o Props
	
	Adobe Audition
	• How to use the UI
	• Edit a sample
		HW: Due next week 2nd class
		• Foley Assignment 1
		   o Groups:
		     ▪ Campus record 5 sounds
		     ▪ Online Record 5 environments
		     ▪ Online/On Campus Edit
		     ▪ Students have choice to edit in Audition or Pro Tools. Cannot edit in Ableton.
		   o Provide constructive feedback to 2 other group's submitted work.

14	Discuss Final Project	HW: • Final Project – Pre-Production

Audio_Design_and_Digital_Production_Syllabus_V1_TD

11/22	- Group Project - Foley for 15-minute video of a real film. - How to edit to film - Compress Video File - Import video to Pro Tools - Setup your session - Work with your group		- Work with your team through discussion forum. (Each group will have their own DF) - Setup team roles, decide on film to apply SFX and score. - Online must collect HQ SFX online and edit them to manageable quality - On Campus must record at least 10-20 sounds.
11/24	**HOLIDAY – Thanksgiving**		
15			HW: Work on Final project
11/29	Studio Time to work on Foley recording and editing.		
12/1	Surround Sound mix - What is 5.1? - How to setup - In-class demo		
12/6	**Final Exam** **Final Project Due**		***Final Exam on last day of class.*** ***Final Project class viewing on exam day)***

REQUIRED TEXTBOOKS AND SOFTWARE:

1. Lynda.com, Online *Photoshop tutorial (FREE access for UF students)*
2. Pro Tools (Monthly Subscription)
3. Adobe Audition
4. Ableton (Trial)
5. Sound Cloud Account (Free account)

RECOMMENDED MATERIALS:

DIG4255C – Audio Design & Digital Production

1. *The Foley Grail: The Art of Performing Sound for Film, Games and Animation* 2nd edition by Vanessa Theme Ament
2. *Understanding Audio: Getting the Most out of your Project or Professional Recording Studio* by Daniel M. Thompson
3. *Modern Recording Techniques* 8th edition by David Miles Huber
4. SFX - freesound.org
   a. http://filmsound.org/sound-effects/libraries.htm
5. multi pack - http://www.cambridge-mt.com/ms-mtk.htm
6. http://music.tutsplus.com/
7. http://www.musictheory.net/
8. http://www.soundonsound.com/

MATERIALS AND SUPPLIES FEES:

Material and supply fees are assessed for certain courses to offset the cost of materials or supply items consumed in the course of instruction. A list of approved courses and fees is published in the Schedule of Courses each semester. (UF-3.0374 Regulations of the University of Florida)

Material and supply and equipment use fee information is available from the academic departments or from the schedule of courses (Florida Statutes 1009.24).   The total M&S for this class is $52.26

EVALUATION OF GRADES

Assignment	Total Points	Percentage of Grade
Attendance/Participation/Quizzes	200	20%
Assignments/Projects	400	40%
Final Project	250	25%
Final Exam	150	15%
Total:	1000	100%

GRADING SCALE:

Letter Grade	% Equivalency	GPA Equivalency
A	94 – 100%	4.0
A-	90 – 93%	3.67
B+	87 – 89%	3.33
B	84 – 86%	3.00
B-	80 – 83%	2.67
C+	77 – 79%	2.33
C	74 – 76%	2.00
C-	70 – 73%	1.67
D+	67 – 69%	1.33
D	64 – 66%	1.00
D-	60 – 63%	.67

Audio_Design_and_Digital_Production_Syllabus_V1_TD

E, I, NG, S-U, WF	0 – 59%	0.00

More information on grades and grading policies is here:
https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

COURSE POLICIES:

PARTICIPATION / ATTENDANCE POLICY
We value participation more than mere attendance. Each Instructor is responsible for communicating the specific details of what percentage of your grade (if any) will be assigned to participation, and how class participation will be measured and graded. Real Time [RT] interaction with your peers and the Instructor will empower you to greater achievement.

MAKE-UP POLICY
Presentations may not be presented late. Documented emergencies or medical situations may be the only accepted reasons for an excused absence on the day of a presentation.

COURSE TECHNOLOGY
The students will be required to have access to, and use a personal computer with the access to the Internet. Word editing software will be required for written assignments.

The University of Florida and Digital Worlds requires that students have access to and on-going use of a laptop/mobile computer for DIG courses in order to be able to function in the current learning environment. Students are required to access electronic forms of information, submit assignments and communicate with other students and faculty electronically. DW requires each student's mobile computer to meet certain minimum specs for heavy graphics use, the requirements documented below must be met.

DW Computer Requirements
http://digitalworlds.ufl.edu/programs/ba-in-digital-arts-sciences/new-student-buyers-guide/

COURSE COMMUNICATIONS
Students can communicate directly with the Instructor regarding the course material through the course management system (CANVAS).

COURSE TECHNOLOGY SUPPORT:

The Technology Support Center provides computer support for Digital Worlds students who access Visimeet, lecture recordings, student equipment, facilities and other technology-based resources.
http://digitalworlds.ufl.edu/support

For computer assistance related to Visimeet, lecture recordings, student equipment, and facilities request please Submit a Help Ticket or email support@digitalworlds.ufl.edu.

For support related to account services, technical consulting, mobile device services, software services, administrative support, application support center, and learning support services, please contact the UF Computer Help Desk available 24 hours a day, 7 days a week at 352-392-4357 or helpdesk@ufl.edu.

UF POLICIES:

UNIVERSITY HONESTY POLICY
UF students are bound by The Honor Pledge that states, "We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: "On my honor, I have neither given nor received unauthorized aid in doing this assignment." The Honor Code specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

CLASS DEMEANOR
Students are expected to arrive to class on time and behave in a manner that is respectful to the instructor and to fellow students. Please avoid the use of cell phones and restrict eating to outside of the classroom. Opinions held by other students should be respected in discussion, and conversations that do not contribute to the discussion should be held at minimum, if at all.

STUDENTS REQUIRING ACCOMMODATIONS
Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

NETIQUETTE COMMUNICATION COURTESY
All members of the class are expected to follow rules of common courtesy in all email messages, threaded discussions and chats, more information can be found at: http://teach.ufl.edu/wp-content/uploads/2012/08/NetiquetteGuideforOnlineCourses.pdf

ONLINE COURSE EVALUATIONS
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

CAMPUS RESOURCES

HEALTH AND WELLNESS
U Matter, We Care
If you or a friend is in distress, please contact umatter@ufl.edu or 352 392- 1575 so that a team member can reach out to the student.

Counseling and Wellness Center
http://www.counseling.ufl.edu/cwc/Default.aspx, 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

Sexual Assault Recovery Services (SARS)
Student Health Care Center, 392-1161.

University Police Department, 392-1111 (or 9-1-1 for emergencies). http://www.police.ufl.edu/

ACADEMIC RESOURCES
E-learning technical support, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.

Career Resource Center, Reitz Union, 392-1601. Career assistance and counseling. http://www.crc.ufl.edu/

Library Support, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.

Teaching Center, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring. http://teachingcenter.ufl.edu/

Writing Studio, 302 Tigert Hall, 846-1138. Help brainstorming, formatting, and writing papers. http://writing.ufl.edu/writing-studio/

Student Complaints Campus:
https://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf

On-Line Students Complaints:
 http://www.distance.ufl.edu/student-complaint-process

Disclaimer: This syllabus represents the instructor's current plans and objectives. As we go through the semester, those plans may need to change to enhance the class learning opportunity. Such changes, communicated clearly, are not unusual and should be expected.