

## **DIGITAL ORCHESTRATION**

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### **SYLLABUS**

#### **COURSE DESCRIPTION**

Advanced techniques and practices around digital orchestration—MIDI programming, sample selections, and DAW workflows facilitating the production of lifelike virtual digital band and/or orchestra recordings. Assignment sequence begins with programming individual digital instrument performances, moving on to chamber ensembles, and finally programming full-scale virtual band or orchestra. For the final project, students produce a virtual band, concert orchestra, or film score orchestra recording to professional standards.

#### **PREREQUISITES**

- workflow proficiency in Logic Pro, Cubase, or Pro Tools
- baseline knowledge of instrumentation (MUCP 3320 equivalent)
- some previous experience in composing for or arranging for acoustic instrumental ensembles

#### **“MEETS WITH” PARAMETERS**

The class also carries a “meets with” designation. All students are required execute on the standard class requirements with additional requirements for students enrolled at graduate level outlined in the addendum to follow.

#### **CLASS REQUIREMENTS**

Students will be required to produce a number of project assignments using professional DAW software and acoustic sample library sound sets. Students are solely responsible for facilitating access to these resources for outside class work.

The UNT College of Music Computer Lab has four media composition workstations outfitted with the necessary hardware and software. Responsibility for scheduling time at these workstations is the sole responsibility of the student. As these resources are limited, the instructor cannot guarantee their access which will be on a first-come-first-serve basis using an online registration system. The instructor will work to maintain coordinated efforts with computer lab staff to facilitate adequate media comp workstation access as possible. It is agreed that by taking this class, the student acknowledges that any difficulty scheduling adequate workstation time will not be accepted as excuse for any late or incomplete work.

## GRADED ASSESSMENTS

- micro-analysis presentations and discussions (in-class and online)
- large scale collaborative film analysis project
- collaborative media project
- graduate students will be assigned an additional specialized orchestration project or an analysis project/demonstration (see addendum).

## GRADING PERCENTAGES

- Assignments: 35%
- Participation: 35%
- Final Project: 30%

## SCALES

- A = 90-100%
- B = 80-89%
- C = 70-79%
- D = 60-69%
- F = Below 60%

## REQUIRED TEXT

Ownership of, or access to, professional DAW software and acoustic sample library sound sets (as stated above).

## TOPICS AND TECHNIQUES

- digital orchestration overview
- multi-sampling techniques
- audio/midi signal path workflows
- midi protocols
- DAWs and sample host programs
- sample libraries
- composition templates demonstration
- humanization: sample articulations
- humanization: sampler controllers
- expression maps (Logic / Cubase)
- humanization: tempo maps
- humanization: physics and acoustics
- humanization: syntactic inaccuracy
- workflows: start with existing audio recording source

- workflows: start with live MIDI recording
- workflows: start with existing MIDI recording source
- templates: choosing libraries
- templates: workflow design
- templates: resource management
- templates: audio signal path design
- mixing: spatial signature normalizing
- mixing: individual positioning and EQ
- mixing: automation techniques
- mastering: dynamics and loudness
- mastering: EQ matching to reference

## SCHEDULE

### **Week 1**

Digital Orchestration Overview

### **Week 2**

Sample Libraries

### **Week 3**

Idiomatic sounds and MIDI Controllers

### **Week 4**

Tempo Maps

### **Week 5**

Expression Maps

### **Week 6**

DAW Template Design

### **Week 7**

DAW Template Design

### **Week 8-10**

Digital Reproduction from Existing Recording

### **Week 11-12**

Digital Reproduction from Existing Score

### **Week 13**

Spatial Normalization / Mixing and Mastering

### **Week 14-15**

Final Project Labs and Presentations

## UNIVERSITY INFORMATION AND POLICIES

Academic Integrity [vpaa.unt.edu/dcgcover/resources/integrity](http://vpaa.unt.edu/dcgcover/resources/integrity)

Student Behavior [deanofstudents.unt.edu/conduct](http://deanofstudents.unt.edu/conduct)

Access to Information – Eagle Connect [eagleconnect.unt.edu/](http://eagleconnect.unt.edu/)

Office of Disability Accommodation (ODA) [disability.unt.edu](http://disability.unt.edu) phone: (940) 565-4323

2018-2019 Semester Academic Schedule (with Add/Drop Dates)

[catalog.unt.edu/content.php?catoid=20&navoid=2120](http://catalog.unt.edu/content.php?catoid=20&navoid=2120)

Academic Calendar at a Glance, 2018-2019 [www.unt.edu/catalogs/2018-19/calendar](http://www.unt.edu/catalogs/2018-19/calendar)

Final Exam Schedule <https://registrar.unt.edu/exams/final-exam-schedule/>

Financial Aid and Satisfactory Academic Progress

Undergraduates [financialaid.unt.edu/sap](http://financialaid.unt.edu/sap)

Graduates [financialaid.unt.edu/sap](http://financialaid.unt.edu/sap)

Retention of Student Records [ferpa.unt.edu/](http://ferpa.unt.edu/)

Counseling and Testing

UNT's Center for Counseling and Testing [studentaffairs.unt.edu/counseling-and-testing-services](http://studentaffairs.unt.edu/counseling-and-testing-services).

More information on mental health issues [speakout.unt.edu](http://speakout.unt.edu).

## GRADUATE STUDENT ADDENDUM

Graduate students are responsible for the following additional requirements.

Graduate students will complete an additional final project assignment embodying significant original research utilizing digital orchestration techniques learned in class. Assessments of this additional work will be reflected in the student's "final project" percentage assessment. Two **additional one-hour group meetings** will be scheduled by instructor with enrolled graduate students to discuss project proposals and work progress. Participation in these discussions will apply to each student's final "class/lab participation" percentage assessment.