



SCHOOL OF MUSIC

TEXAS TECH

J.T. & Margaret Talkington College of Visual & Performing Arts

# DMA LECTURE RECITAL

**Stuart Anderson, double bass**

Sunday, November 3, 2024 | 7:00 pm

Hance Chapel

## **Sonic Effects of Bow Force Vector Differentials on Bowed Stringed Instruments**

### **I. Overview of Experimental Study**

- a. What is a Bow Force Vector?
- b. Axes of Rotation: Pitch, Roll, and Yaw
- c. Background Information on Bowing Parameters and Bow Angles
- d. Existing Research
- e. Purpose and Scope
- f. Introduction to Techniques A & B

### **II. Video and Roll Angle Study**

- a. Introduction to Technology Used for Measurement (Live Demonstration)
- b. Video Analysis Procedure
- c. Results

### **III. Qualitative Survey Study**

- a. Terms Used to Describe Tone
- b. Survey Procedure
- c. Live experiment
- d. Results

### **IV. Conclusion and Future Research**

This recital is presented in partial fulfillment of the requirements  
for the Doctor of Musical Arts degree.

Stuart Anderson is a student of Professor Mark Morton.

## Upcoming Events

***Caprock English Bagpipe Consort***

8:00pm, Monday, November 4

The Kent R. Hance Chapel

***Percussion Ensemble, Steel Drum Band, & Samba Ensemble Concert***

8:00pm, Monday, November 4

Hemmle Recital Hall

***Eva Browning Artist Series William Westney and Daniel del Pino, duet  
piano***

6:00pm, Friday, November 8

Hemmle Recital Hall