

# AET 4220/5430 Test 1

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## Audio Software Development

March 25th, 2025

### 1 CREATING AN TREMOLO PLUG-IN

Congratulations! After graduating from Belmont University, you started a job as a software developer at XYZ Audio (a completely hypothetical company, making hypothetical software, and paying you hypothetical money). You are working as part of a team developing audio plug-ins using the JUCE framework. For your first task, the team's DSP engineer asks you to create a simple plug-in that demonstrates a Tremolo effect in C++.

You are to use the provided **TremoloEffectProcessor** code as part of a plug-in. You should add interface objects to control the rate and depth of the effect. The rate should have a range of 0.1 - 5 Hz. The depth should have a range of 0-1. Include labels on the knobs to show which is which.

A JUCE test project has been provided to you to demonstrate the effect. Add your interface code to the PluginEditor. Then you also need to add an instance of your effect in the PluginProcessor and show it working.

### 2 SUBMISSION

When completed, create a compressed zip folder of the entire JUCE project. You can delete the "Builds" folder. Name the zip file: XXX\_AET5420Test1.zip, where X is your last name. Then email the zip file to: eric.tarr@belmont.edu.