Title: VIBRATIONAL PROPERTIES OF BAGLAMA (EXPERIMENTAL)

Reference: BAG-EXP

Position Availability: 1 Student

Project Description: Certain vibrational properties of baglama soundboard will be determined using frequency response techniques and resonance. Results will be compared to those obtained in numerical studies from other ME492 projects, completed previously and/or currently underway.

Work Description:

- **Construction of an experimental setup.** Requires usage of solid modeling tools, engineering drawings, hands-on construction of parts and subsystems, production and assembly.
- **Conducting frequency response, resonance, and mode shape determination experiments.** Requires use of loudspeakers for excitation, MATLAB for signal generation, accelerometers, data collection.
- **Comparison of experimental and numerical results.** Requires graphical data representation, tabulation of data, data analysis techniques.

Required Qualifications and Skills:
- A good understanding of vibration phenomenon
- A familiarity with numerical analysis and solid modeling software.
- Experimental work