

PROJECT PROFILE: **CLASSROOM**



PROJECT: MSU GAINES HALL
Bozeman, MT

MSU's Gaines Hall underwent a \$32.5 million renovation to update the entire the building, including new classrooms, laboratories, group meeting areas, and a 270 seat Lecture Hall. Big Sky Acoustics was selected as part of the design team to create one of MSU's premiere instructional facilities, and the first LEED certified building on campus.

BSA's SERVICES AND SOLUTIONS:

Acoustical design goals:

- Control reverberation in the Lecture Hall for speech intelligibility.
- Restrict HVAC system noise throughout the building to enhance communication.
- Limit the noise of outdoor HVAC equipment at nearby buildings and common areas.

BSA's analysis included:

- Specified the acoustic materials and square footage of the sound-absorbing and sound reflecting options for the Lecture Hall.
- Predicted the interior and exterior noise levels produced by HVAC equipment, including the:
 - ◇ Air-handling units,
 - ◇ Roof-top chiller,
 - ◇ Exhaust fans,
 - ◇ Cooling towers, and
 - ◇ Phoenix valves.
- Specified the required performance of HVAC noise and vibration control measures, including the duct liner, duct attenuators, and vibration isolation mounts.

