

Gaines – Deferred Maint/Renovation Project - \$18,000,000
MSU-Bozeman

- The Gaines Hall Renovation project is the Board of Regents' #1, Large Capital Project Priority. Gaines has been the Regents' #1 Priority since 2002 (see attached Montana University System LRBP Project Priority Listing from September 2004).
- Gaines Hall, MSU's chemistry teaching facility, is nearly 50 years old – some of its laboratory benches and casework were transferred from Trahagen Hall and are nearly 80 years old – and the building has never been substantially updated.
- This project does not create additional new building space that the State will have to maintain. Instead, this project renews existing essential instructional space – and – eliminates the University's largest, single-building, accumulation of unfunded deferred maintenance.
- Gaines Hall is essential to the University's instructional programs - however, it is nearing the point at which it will no longer be able to adequately and safely serve the thousands of students who enroll in chemistry classes each year.
- A large majority of all the 12,000 students who attend MSU take one or more chemistry courses as an essential component of their college education. Other instructional courses delivered in Gaines Hall's multi-use instructional spaces include Biology, Sociology, Communications, Accounting, Military Science, Architecture, History, Math, Psychology, Economics and English.
- Gaines Hall also houses the University's largest (300 seat), general-use lecture hall.
- On an annual basis, Gaines Hall by itself, continuously serves as many or more student FTE than the majority of COT's and some of the 4-year campuses in the MUS (see attached Comparison Graph).
- Gaines Hall is an 81,000 square foot, four-story building built in the early 1960's to house the Chemistry Department. It includes teaching labs, research labs, offices, registrar-controlled classrooms and a variety of support spaces.
- While several small upgrade projects have been executed in limited areas of the building over its almost 50 years of use, the buildings teaching spaces, laboratories and infrastructure systems are either obsolete or have served beyond their expected useful life cycles.
- Students from almost all curricula at MSU-Bozeman are required to take general chemistry classes and the faculty works hard to expose enough students to the challenges and rewards of chemistry to entice a steady number of them to further pursue the sciences as a course of study and a career.
- All of the laboratories in Gaines Hall will be used to deliver undergraduate and graduate instruction.
- Laboratory-based instruction is essential in chemistry and biochemistry to prepare students for successful careers in the private sector, e.g., biotechnologies, pharmaceuticals, agri-chemicals, etc.
- The Chemistry Dept is one of the two largest Ph.D-granting departments at MSU.
- A former grad student/employee, claiming injury related to the inadequate ventilation system, sued MSU in the past.

- The Gaines Hall Deferred Maintenance/Renovation project will essentially renovate the entire existing facility so that it can continue to house teaching and support functions for Organic Chemistry, Inorganic Chemistry, Physical Chemistry, Biochemistry, Analytical Chemistry, and General Chemistry. In addition to modernizing the teaching environments, deferred maintenance and safety concerns to be addressed include:
 - The building structural system is inadequately designed for Bozeman's seismic conditions.
 - Mechanical systems are outdated, require frequent maintenance, and do not meet current code requirements for ventilation, exhaust, etc.
 - The building envelope is not insulated and the windows are single-pane, causing considerable energy inefficiency, widely varying internal environments and occupant discomfort.
 - The laboratories are outdated, worn, and poorly organized for current teaching requirements. Some of the laboratory cabinets are over 80 years old, having been salvaged from Traphagen Hall, which was constructed in 1922!
 - Electrical systems do not adequately serve the needs of the building due to the tremendous increases in equipment over the years and the universal need for more computers.
 - The lecture hall (the largest on campus >300 seats) is very worn, has poor sight lines, poor acoustics, inadequate lighting, and worn seating, and needs to have the audio and video upgraded. This lecture space is used by many departments in addition to Chemistry and does not function well for anyone. ADA accessibility is limited and ventilation/cooling is inadequate for such a large student capacity.
 - Building plumbing is significantly deteriorated, from fixtures and faucets to acid waste lines and the main waste line in the building.
 - Asbestos-containing materials still exist throughout the building and need to be abated.

ITEM 124-103-R0704

Approval of Project Priority List, Long Range Building Program Montana University System

THAT:

The Board of Regents of the Montana University System adopts the following Project Priority List for submission to the Department of Administration.

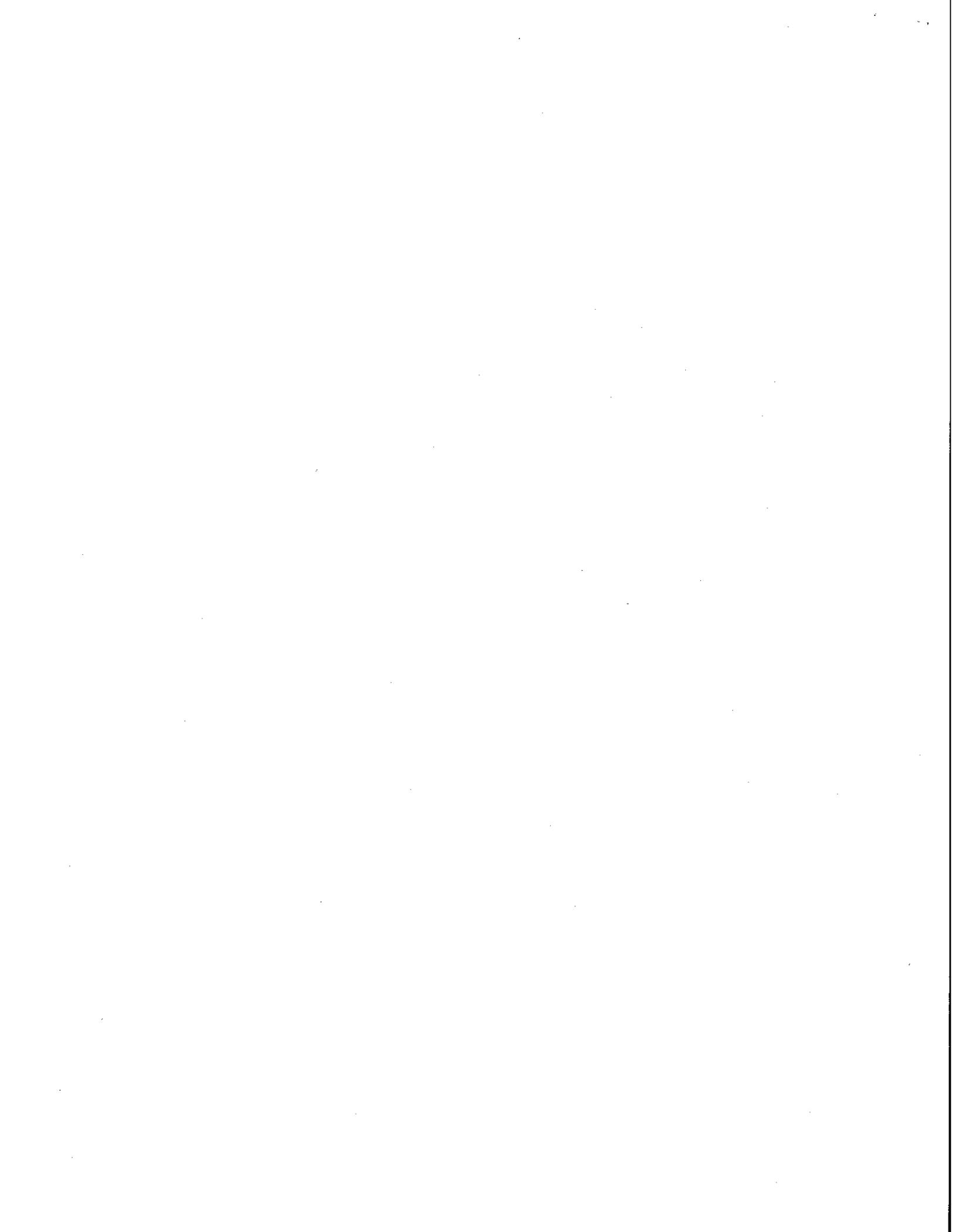
EXPLANATION:

Each agency is required to submit a proposed long range building program to the Department of Administration in accordance with 17-7-202, MCA.

**MONTANA UNIVERSITY SYSTEM
LONG RANGE BUILDING PROGRAM
2006-2007 BIENNIUM**

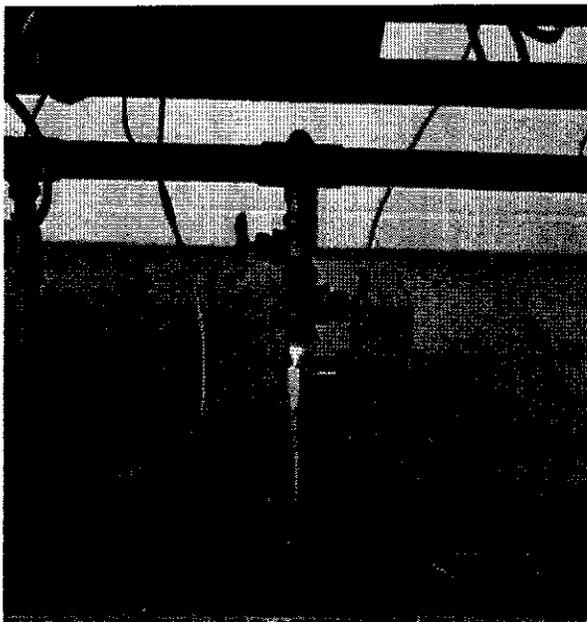
Project Priority Listing

MUS Priority	University Priority	Location	Project Description	Funding	
				LRBP	Other
1	1	Bozeman	Heating Plant Seismic Bracing	\$150,000	
2	1	Missoula	Replace Buried Steam Lines/Phase 1	\$500,000	
3	2	Havre	Replace Pershing Hall Heating System	\$425,000	
4	2	Dillon	Renovate Water Distribution System	\$203,000	
5	3	AES	Pesticide Storage - Hazardous Matl. Clean Up	\$250,000	
6	1A	Missoula	Replace HVAC/Abate Asbestos - Science Complex 4th Floor	\$610,000	
7	4	Great Falls	Replace 22 Failed Windows	\$95,000	
8	5	Billings	Replace Boiler - Academic Center	\$100,000	
9	3	UM-All Campuses	Replace/Upgrade Fire Alarm Systems	\$200,000	
10	8	Havre	Replace Cooling Tower - Brockman	\$160,000	
11	4	Missoula	Replace/Update Health Science HVAC Phase II	\$1,085,000	
12	MSU-7&UM-13	MUS-All Campuses	Repair/Replace Roofs - Various	\$1,400,000	
13	Various	MUS-All Campuses	Code/Deferred Maintenance and Disability Access	\$1,400,000	
14	9	Bozeman	Gaines Renovation	\$18,000,000	
15	6	Helena	HCOT - New Building Construction	\$7,500,000	
16	7	Butte	MBMG/Petroleum Building New Construction	\$14,400,000	
17	10	Great Falls	COT Addition/Maintenance	\$20,750,000	
18	11	Billings	COT Addition/Maintenance	\$17,600,000	
Authority Only		UM-All Campuses	General Spending Authority - All UM Campuses		\$7,000,000
Authority Only		Missoula	Consolidate COT Campus - New Construction		\$24,500,000
Authority Only		Missoula	Construct New Gallery Space		\$6,000,000
Authority Only		Missoula	O&M Journalism Building		N/A
Authority Only		Missoula	Construct New Forestry Complex		\$20,000,000
Authority Only		Bozeman	Design and Construct New Animal Bioscience Building		\$30,000,000
Authority Only		MSU-All Campuses	General Spending Authority - All MSU Campuses		\$7,000,000
Authority Only		Bozeman	Museum of the Rockies Renovation/Addition		\$12,000,000
Authority Only		Bozeman	Construct New VisCom Black Box Theatre		\$2,750,000



Gaines Hall

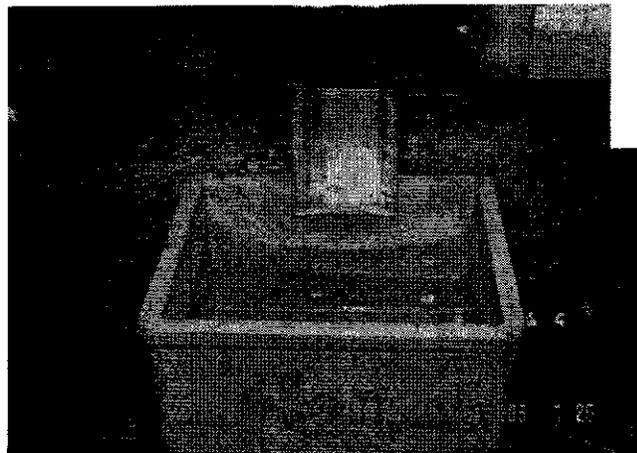
Deferred Maintenance & Renovation



Typical antique classroom lab countertop utilities

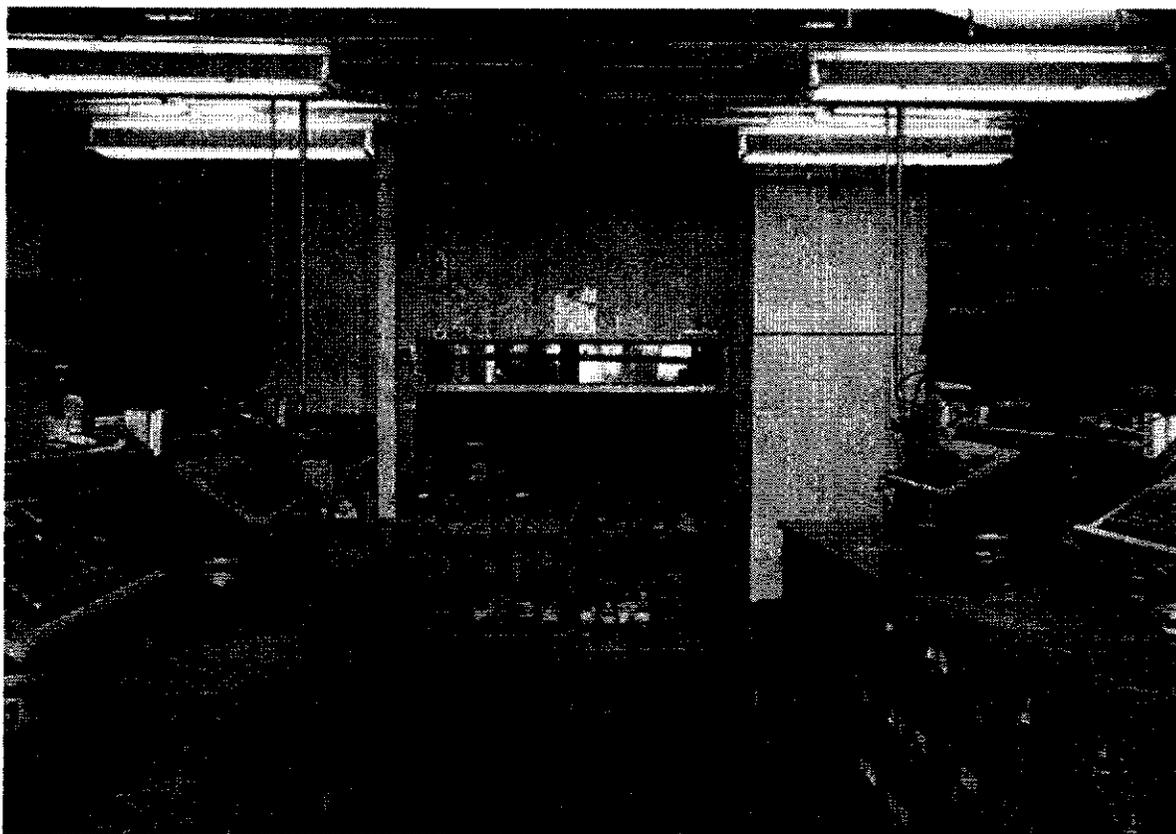
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The deferred maintenance in Gaines Hall is equal to 1/3 of the replacement cost of the building, making it one of the most deficient buildings on campus.



Open drain at lab countertops

The Gaines Hall Renovation as envisioned will enhance the education of chemistry and biochemistry students and increase the emphasis on scientific interdisciplinary student learning by eliminating significant accumulated deferred maintenance problems, addressing building system/code deficiencies and by adapting teaching environments to accommodate modern technology and teaching methods. The laboratories, classrooms, and informal spaces for student/faculty interaction will take advantage of proven state-of-the-art technology to provide global access to information, data resources, and expertise to involve students in the methods and process of inquiry. The renovated facility will support the goal of providing the knowledge, technical skills, and experience needed by MSU undergraduate and graduate students to excel.



Typical classroom lab: cabinets date from 1922 and were relocated from Traphagen Hall when Gaines was built. Fume hood does not meet standards, and countertops are very worn. Computer stands are makeshift, at the wrong height and inconvenient.

***This project will allow the building to
function effectively to meet the needs
of modern academic programs
demanded by today's students.***

Derferred Maintenance and Safety Concerns to be Addressed:

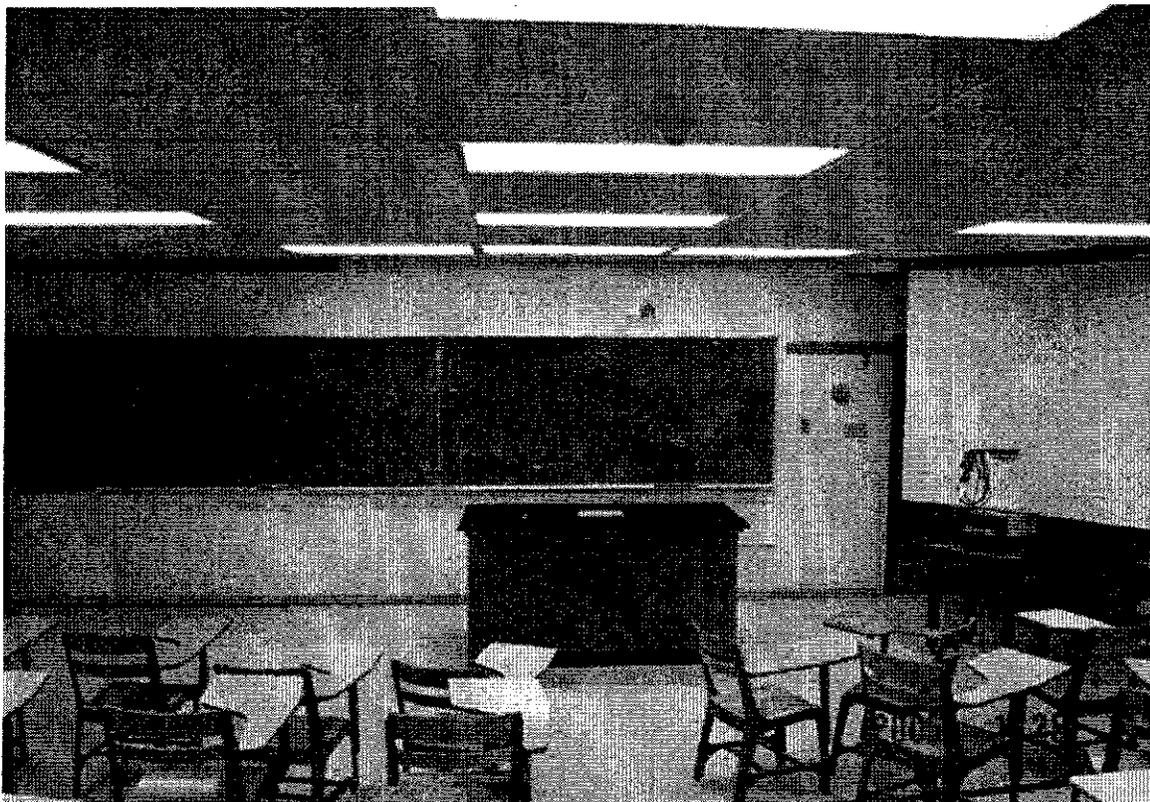
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Asbestos-containing materials still exist throughout the building and need to be abated.

C hemistry is a Core Requirement

Students from almost all curricula at MSU-Bozeman are required to take general chemistry classes and the faculty hopes to expose enough students to the challenges and rewards of chemistry to entice them to further pursue the sciences as a course of study and a career. The Gaines Hall Deferred Maintenance/Renovation Project is intended to create state-of-the-art teaching laboratories for MSU's students and to take advantage of the successful, national caliber teaching and research faculty that MSU has to offer.



Typical lecture-style classroom, still using blackboards and transparency projector. Classrooms do not support modern teaching technology such as knowledge delivery via computer and true image projection.

For further information, please contact via e-mail:

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