

# Design for Innovative Learning

Hood River Valley High School | Hood River, Oregon

Opsis Architecture



The dramatic transformation for Hood River Valley High School creates an updated, innovative facility suited to 21<sup>st</sup> century learners. Part of a district-wide renovation project for nine different schools, Hood River Valley High School faced rapidly increasing enrollment and needed to update its aging, dated facilities. Opsis Architecture, retained for all of the renovation projects, provided programming and design services for the 16,000 sf new construction and 25,000 sf renovation project.

Faced with a tight schedule and limited budget, Opsis collaborated with the facilities director and school staff to develop programming and designs that maximized educational value and addressed the needs of today's students. The creative process resulted in spaces that maximize daylight, integrate technology and give students the opportunity to both learn and interact with their teachers and peers. Included in the scope was a new and updated science wing, expansion to the music program, school-wide restroom upgrades, renovation of the existing gymnasium and improvements to the facade and major entry points.



## Design for Science

The addition of a new science wing for Hood River Valley High School provided the opportunity to create a set of facilities designed around contemporary science curriculum and pedagogy. Facing rapid enrollment growth combined with outdated and undersized science classrooms and labs, the team worked closely with the District administration and the High School Science teachers to develop an education specification centered on the idea of integrating lab and lecture in one space. The team studied many models for this type of program and the resulting design allows for students and teachers to move quickly from one learning modality to another. After careful analysis, it was determined that it would be more cost effective to build all new science labs and renovate the existing labs into general science classroom space. This approach allows for all of the labs to have uniform layouts and the most recent AV technology, hoods and safety features.

## Daylighting

One of the key considerations was how to achieve maximum daylighting while not increasing the module width of the lab/classroom. The final scheme uses a daylight monitor above the lecture hall to bring daylight deep into the building. Additional skylights in the corridor create a space that will rarely require electric lighting during the day and is a dramatic departure from the existing windowless science wing.



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## Safety

Science labs present one of the largest safety situations in a High School. The District chose to invest some additional costs into two sided glass hood stations that allow the teacher a full view across the lab from any point. In addition, the added visibility allows the teacher to better assess each students groups procedure and progress during the experiments.

## AV Technology

Each lab is fully equipped with smart board video projection and computer locations at the group bench areas. By combining and integrating this technology with the lab and lecture area, teachers can easily take experiment results and instantly project them for the whole class allowing for real-time learning and feedback.



Above: The new classroom features concrete flooring, ample storage and combined lecture/lab space. Windows along the back of the room provide views to the outdoor courtyard.



Right: Previous classrooms were tight on space and provided little daylight and view to the outdoors.

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Left: Abundant natural light filters through the ceiling in the hallway that connects the existing classrooms to the new science wing. The inviting space has become a popular place to hang out between classes.

Below: The former hallway in the old science wing was dark and discouraged students from spending any time there outside of class.



create

Improvements to the music and arts program include a new ensemble room with wall and ceiling paneling and moveable curtains for effective acoustic performance. Bright colors and daylighting create an inviting space for rehearsals and small performances. The large rehearsal room, the office for the drama teacher and storage units were renovated, while two dressing rooms and a make-up room were added to support the program.

The project included upgraded restrooms throughout the building and new bleachers and flooring in the gymnasium, increasing the capacity to 2,000 and allowing code-compliant assemblies.

To enable continuous use of the school, Opsis planned the addition and renovations to occur in three phases. Work related to the building additions was scheduled over the course of the school year, with initial restroom additions occurring at the beginning of construction activities, and subsequent renovations occurring over the following summer break.



Throughout the new and renovated spaces, bold colors and natural finishes create inviting places for students to both learn and socialize.



Bioswales with native vegetation capture stormwater along the exterior of the new science wing.