



Shawn King
Associate Vice President

MEMORANDUM

To: Jen Masterson, Senior Budget Assistant to the Governor, Office of Financial Management
From: Shawn King, Associate Vice President for Facilities and Planning
Date: August 15, 2022
Re: Major Capital Project Proposal – Science Building Phase II Construction
Renovation – Major 40000115

Eastern Washington University's major project proposal for OFM project number 40000115 Science Building Phase II Construction in the Renovation - Major Category, in accordance with requirements of the Office of Financial Management's 2023-2025 Capital Project Evaluation System.

An electronic copy of this project proposal can be found at the link below:

[OFM 2023-2025 Capital Project Evaluation System](#)

If you have any questions or issues with the link provided, please let me know.

Best Regards,

2022 PROJECT PROPOSAL CHECKLIST
2023-25 Biennium Four-year Higher Education Scoring Process

INSTITUTION	CAMPUS LOCATION
370 - Eastern Washington University	Cheney, Washington
PROJECT TITLE	OFM/CBS Project #
Science Building Phase II Construction	40000115
PROJECT CATEGORY	FPMT UNIQUE FACILITY ID # (OR NA)
Renovation - Major	A06319
PROPOSAL IS	
New or Updated Proposal (for scoring)	Resubmitted Proposal (retain prior score)
<input checked="" type="checkbox"/> New proposal <input type="checkbox"/> Resubmittal to be scored (more than 2 biennia old or significantly changed)	<input type="checkbox"/> Resubmittal from 2018 (2019-21 biennium) <input type="checkbox"/> Resubmittal from 2020 (2021-23 biennium)
CONTACT	PHONE NUMBER
Troy Bester	509-359-2204

Proposal content

- Project Proposal Checklist: this form; one for each proposal
- Project Proposal Form: Specific to category/subcategory (10-page limit)
- Appendices: templates, forms, exhibits and supporting/supplemental documentation for scoring.

Institutional priority

- Institutional Priority Form. Sent separately (not in this packet).

Check the corresponding boxes below if the proposed project meets the minimum threshold or if the item listed is provided in the proposal submittal.

Minimum thresholds

- Project is not an exclusive enterprise function such as a bookstore, dormitory, or contract food service.
- Project meets LEED Silver Standard requirements.
- Institution has a greenhouse gas emissions reduction policy in place in accordance with RCW 70A.45.050 and vehicle emissions reduction policy in place per RCW 47.01.440 or RCW 43.160.020 as applicable.
- A complete predesign report was submitted to OFM by July 1, 2022 and approved.
- Growth proposals: Based on solid enrollment projections and is more cost-effectively providing enrollment access than alternatives such as university centers and distance learning.
- Renovation proposals: Project should cost between 60 – 80% of current replacement value and extend the useful life of the facility by at least 25 years.
- Acquisition proposals: Land acquisition is not related to a current facility funding request.
- Infrastructure proposals: Project is not a facility repair project.
- Stand-alone, infrastructure and acquisition proposals is a single project requesting funds for one biennium.

2022 PROJECT PROPOSAL CHECKLIST
2023-25 Biennium Four-year Higher Education Scoring Process

Required appendices

- Project cost estimate: Excel C-100
- Degree Totals and Targets template to indicate the number of Bachelors, High Demand and Advanced degrees expected to be awarded in 2023. (Required for Overarching Criteria scoring criteria for Major Growth, Renovation, Replacement and Research proposals).
- Availability of Space/Campus Utilization template for the campus where the project is located. (Required for all categories/subcategories except Infrastructure and Acquisition proposals).
- Assignable Square Feet template to indicate program-related space allocation. (Required for Growth, Renovation and Replacement proposals, all categories/subcategories).


Optional appendices

Attach supplemental and supporting project documentation, *limit to materials directly related to and needed for the evaluation criteria*, such as:

- Degree and enrollment growth projections
- Selected excerpts from institutional plans
- Data on instructional and/or research space utilization
- Additional documentation for selected cost comparables (acquisition)
- Selected materials on facility conditions
- Selected materials on code compliance
- Tables supporting calculation of program space allocations, weighted average facility age, etc.
- Evidence of consistency of proposed research projects with state, regional, or local economic development plans
- Evidence of availability of non-state matching funds
- Selected documentation of prior facility failures, high-cost maintenance, and/or system unreliability for infrastructure projects
- Documentation of professional assessment of costs for land acquisition, land cleanup, and infrastructure projects
- Selected documentation of engineering studies, site survey and recommendations, or opinion letters for infrastructure and land cleanup projects
- Other: Energy Audit Report

I certify that the above checked items indicate either that the proposed project meets the minimum thresholds, or the corresponding items have been included in this submittal.

Name: Shawn King Title: AVP Facilities and Planning

Signature:  Date: 8/15/2022

Science Building Phase II Construction



Renovation – Major Project



2023 – 2025 Capital Budget

RENOVATION – MAJOR PROJECT

2023-25 Biennium Project

2022 Higher Education Project Proposal Form

INSTITUTION	CAMPUS
Eastern Washington University	Cheney, Washington
PROJECT TITLE	
Science Building Phase II Construction - 40000115	

SUMMARY NARRATIVE

- Problem Statement

A complete renovation of the Science Building allows EWU to take strategic advantage of the areas vacated to accommodate needed program growth in the Chemistry, Biology, Physics, Geology and Geography departments as well as resolving health, safety, welfare, and maintenance/repair deficiencies within the current Science Building. Currently under construction is Phase 1 of the renovation, consisting of two of the four wings of the existing Science Building.

EWU requests funding of \$58,000,000 for the construction of Phase 2 of the two-phase Science Building renovation as described in the Predesign report submitted to OFM prior to July 1, 2016. This is a Major Capital Project in the Renovation Category.

Demand for Science Programs Increasing: Since 2008, the number of STEM graduates at EWU have nearly doubled—from 320 students in 2007-08 to 650 in 2019-2020. STEM graduates have grown to be fully one-quarter of all degrees produced by EWU. Yet, we are the only regional university to not add any additional capital capacity for STEM programs in the last decade. At our current growth rate in STEM programs, EWU has exceeded the capacity of current science facilities and we anticipate being unable to meet future demand without the construction of additional science lab space.

We expect that over the ten years, our student population will grow by approximately 20 percent above the current enrollment, and a disproportionately large share of the additional students will be seeking STEM related degrees. EWU has made meeting state and regional workforce demands for additional healthcare professionals as well as engineering and computer science a primary focus of growth in the next decade. In order to meet these state and regional workforce needs, we will have to substantially increase our course offerings in basic science courses including Biology, Chemistry, Biochemistry, Physics, Geology, and Geography. In addition, the modern-day STEM workforce now expects a strengthened interdisciplinary approach to STEM education that will not be possible without this new space. Without an improvement in the quantity and quality of science teaching labs, research labs, and lab support space, EWU will not be able to meet the increased demand for basic sciences and the STEM workforce as a whole.

The existing Science Building is the only facility at EWU that contains research laboratories capable of accommodating science research. Lower division science courses, which were running at or beyond the capacity while in the Science Building, are now held in the Interdisciplinary Sciences Center finished in late 2020. The limited research laboratory space in the existing Science Building is not capable of serving the research needs of science students and faculty. Space for safely storing scientific instruments, preparation space for teaching labs, and specialized storage space for science equipment and reagents used in teaching and research are all lacking.

The existing Science Building has serious deficiencies* that are at odds with the university's mission to provide an excellent student-centered learning environment and exceptional resources and facilities. Deficiencies in the Science Building include health and safety issues, accessibility violations, problematic HVAC systems, technology deficiencies, lack of student spaces, high cost of maintenance and repairs, and very high-energy costs.

* See Appendix H & I, 2:4 Existing Science Building Condition for a detailed breakdown from Science Pre-design Appendix A.

The Science Renovation is necessary because of increasing demand for sciences at EWU, lack of capacity in the current science facilities, and significant deficiencies within the current Science Building. Additionally, EWU trails markedly behind peer institutions in the State of Washington considering the age, quality, and size of science facilities, constraining our ability for growth—despite student and workforce demand.

Vision for EWU Science Center: The new Eastern Washington University Science Center will be comprised of the new Interdisciplinary Science Center and the newly renovated Science Building. Our current science facility presents three major problems that we propose solving through the now complete Interdisciplinary Science Center and the renovation of our existing science building:

- ***The need for additional modern lab capacity:*** The new interdisciplinary science center is primarily teaching and research lab space that meets the needs of Biology, Chemistry/Biochemistry, Geology and Physics. Current labs existing Science Building did not meet modern building codes and has multiple deficiencies that prevent the types of teaching and research necessary in modern STEM fields.
- ***A current lack of capacity for interdisciplinary STEM work:*** The current segmented science building provides little opportunity for cross-disciplinary work as many labs and classrooms are discipline specific and are too outdated to accommodate modern lab needs and equipment. The new facility will provide opportunities for learning and research across disciplines as well as interdisciplinary faculty cooperation that is not possible in the current science building.
- ***Outdated classroom and technology infrastructure:*** Renovation of the existing science building modernizes classroom infrastructure, provides new opportunities for advanced STEM education, and distance learning. Both the Interdisciplinary Science Center and the renovated Science Building will expand current infrastructure supporting virtual courses and provide the Science departments with sufficient teaching lab facilities that support remote learning.

Across the two buildings, the new Science Center will provide:

- State of the art teaching and research laboratory space
- Additional laboratory capacity to accommodate growth across the science disciplines
- Modern classroom space to enable the delivery of distance learning science courses and collaboration with our programs at other EWU locations including Bellevue College and Lower Columbia College
- Additional faculty office space to enable the hiring of new faculty positions to support our growing programs

The approach taken by EWU to complete the entire renovation of the existing Science Building is a phased approach. A study of the potential budget impacts undertaken during the pre-design process found that a capital budget request to address the renovation of the Science Building was a large single request. The 2021-23 request proposed the project to

be funded in two separate biennia. This phased method of construction and funding over multiple biennia allowed the project to move forward as two smaller capital budget requests.

Phasing Approach	Est. MACC	Est. Total Project	Construction Duration	Final Occupancy
Phase 1	\$31,850,000	\$45,000,000	22 months	Oct. 2024
Phase 2	\$41,561,000	\$58,000,000	16 months	Aug. 2025
TOTAL	\$73,411,000	\$103,000,000		

To have a comprehensive understanding of the project and an efficient approach, it was important to conduct an initial entire building study to vet program locations and system needs. The Design Phase carried out in the 2019-2021 Biennium completed the construction documents for both Phase I and Phase II construction. Phase I Bidding documents were prepared for the 2021-2023 Biennium. These same documents will be edited for bidding of the 2023-2025 Biennium's Phase II construction.

- History of the project or facility

EWU requested funding for a Chemistry/Biochemistry and Physics building (Science I) in 2010. This building ranked first priority in its category, but did not receive funding. EWU resubmitted the request in 2012 and 2014, receiving minimal pre-design funding in each biennium. Through the detailed programming and cost analysis of the predesign study, it was determined that Alternative IV, the Interdisciplinary Science Center (ISC), in the Chemistry / Physics predesign would be the option moving forward in terms of funding. This option provided an addition to the north of the existing Science Building that included teaching laboratories and classrooms for chemistry, physics, biology, and geology.

This request seeks to complete the renovation of the existing Science Building with phase 2 funding. Phases 1 and 2 are thought of as the second half of the Science Complex on the Eastern Washington University campus. Working in tandem with the programmatic functions and layout of the ISC, the Science Renovation will house classrooms, research laboratories, teaching laboratories, administration, and offices for the chemistry, biology, physics, and geology programs. In the past year, the University STEM programs have reorganized to combine Chemistry and Physics, and to join the Geology and Geography into one Geosciences department. It is critical that the Science renovation receives State capital funding as the project provides additional space needed to meet the growing demands for STEM and healthcare-based degrees.

Phase 1 will be ready in February of 2024 allowing for use during Phase 2 construction in the 2023-25 biennium. Phase 1 includes primarily Geoscience and Chemistry labs, offices with some Biology labs. Geosciences is the only department that is complete with Phase 1. Other space complete in phase 1 are; student study areas, Student Engagement Center and a digital visualization theatre waiting for phase 2 equipment installation. A complex sequence designed into the two phases is separating and maintaining function of Phase 2 wings during Phase 1 construction and reversed for construction of Phase 2 construction. The two phases, after Phase 2 construction is complete, form a cohesive science facility both in its new energy efficient infrastructure and state of the art programmatic spaces.

- University programs addressed or encompassed by the project

The Science Building will accommodate the Biology, Chemistry, Geology, Geography, and Physics departments. The building will include teaching laboratories, research laboratories, lab support facilities, student project and

study areas, some faculty offices, and classrooms with science demonstration capability that support the lecture needs of the departments.

OVERARCHING SCORING CRITERIA

1. Integral to Achieving Statewide Policy Goals:

Provide degree targets and describe how the project promotes improvement on 2020-21 degree production totals in the [OFM Statewide Public Four-Year Dashboard](#). Include the degree totals and target template in an appendix.

A. Indicate the number of bachelor's degrees awarded at the close of the 2020-21 academic year, and the number targeted for 2023.

Undergraduate degrees awarded = 2278.

B. Indicate the number of bachelor's degrees awarded in high-demand fields at the close of the 2020-21 academic year, and the number targeted for 2023.

STEM/High Demand Undergraduate degrees awarded = 936

C. Indicate the number of advanced degrees awarded at the close of the 2020-21 academic year, and the number targeted for 2023.

Graduate degrees awarded = 893

STEM/High Demand Grad degrees awarded = 176

Appendix D – Degree Totals and Targets Template 2020-21

2. Integral to Campus/Facilities Master Plan

Describe the proposed project's relationship and relative importance to the institution's most recent Campus/Facilities Master Plan or another applicable strategic plan.

In 2014, the university update the Cheney Campus Comprehensive Master Plan. In Horizon 1 (2013 to 2023) 1.4.1, the plan states: Significantly renovate or replace the Science Building. With the anticipated construction of the Interdisciplinary Science Building, several spaces within the existing building will be vacated allowing for growth within the remaining science departments without the potential of making significant additions. The current Comprehensive Campus Master Plan can be seen in its entirety at:

https://in.ewu.edu/facilities/wp-content/uploads/sites/191/2017/01/EWU-CCMP_All-Sections_Web_optimized_v2.pdf

Does the project follow the sequencing laid out in the Master Plan (if applicable)? If not, explain why it is being requested now.

In the 2014 comprehensive master plan, the Interdisciplinary Science Building was to be constructed in two phases, locating both in the southeast quadrant of the Cheney campus. The university shifted the plan and constructed the Interdisciplinary Science Building on a site immediately adjacent to the existing Science Building to house Chemistry, Biology, GeoScience and Physics teaching laboratories and to remodel the existing building to provide all other necessary science research, academic and support functions. The connection of the Interdisciplinary Science Center to the existing Science Building allowed the university to renovate in two phases and maintain program instruction within a connected facility through both phases.

3. Integral to Institution's Academic Programs Plan

Describe the proposed project's relationship and relative importance to the institution's most recent Academic Programs Plan. Must the project be initiated soon to:

A. Meet academic certification requirements?

The academic certification requirements for STEM curriculum is largely dependent on the facilities associated with them, particularly in the areas of laboratory sciences. Given that the Science Renovation project provides space for most of the research in chemistry, biology, physics, and geology, certification hinges on the facility's ability to accommodate these functions that certification requirements. The Science Renovation will have the greatest impact on our ability to conduct NIH-sanctioned research in biology. The present building contains no laboratories certified for Biosafety Level 2 (BL2) research, significantly hindering the ability of faculty and students to conduct biological research. In contrast, the renovated Science Building will have 20 labs eligible to be rated at BL2. This will allow us to meet the certification requirements necessary to conduct academic programs eligible for NIH support.

B. Permit enrollment growth and/or specific quality improvements in current programs?

The new research laboratories in the proposed renovation will allow the expansion of the existing graduate program in Biology and addition of new graduate programs in Environmental Science, Chemistry and Biochemistry, and GIS/Remote Sensing. The greatly expanded aquatics facilities and biotechnology labs will be particularly significant to expand these aspects of the existing Biology MS degree that have been constrained by infrastructure limitations in the existing building. We project that these facilities will allow our science graduate programs to grow by an average of 2.5 MS students per lab. (See Appendix D)

Access to undergraduate research is recognized as one of the most critical retention strategies for undergraduate students. This is particularly important for first generation, underserved, and pell-eligible students. The expansion of research labs will permit faculty to dramatically increase access to research opportunities for undergraduate students in STEM. The expanded research space will also allow faculty to recruit more high school and Running Start students in their research activities, improving the opportunity to recruit talented new students into the disciplines and the university. Finally, the increased number of graduate students who serve as near-peer mentors in research settings will further enhance the recruitment and retention benefits of the renovated space. We anticipate that the greatly expanded research activity stimulated by this project will drive improved recruitment and retention. The renovated biology and biotechnology teaching labs will also permit an expansion of health professions students who take science courses as part of their required curriculum. By combining these impacts with the newly created Nursing program at EWU, we project that Bachelor Degree production in high-demand fields should grow by approximately 40%.

Phase 1 of the Science Renovation has already generated significant interest in the local community, including alumni, industry leaders, and the K-12 community. EWU's First-Time In College (FTIC) student enrollment has increased 5-8% since the beginning of Science Phase 1. Crucially, Running Start enrollments (a major recruiting pool for EWU) has increased 10-15% since the Renovation of Science began. We believe that this exciting project will drive a significant increase in overall recruitment for the university.

C. Permit initiation of new programs?

The Science Renovation project is critical to the initiation of new programs in the STEM fields. The current Science building allows only half of faculty in the sciences to have a dedicated research laboratory, dramatically limiting the college's ability to offer graduate-level programs. The project includes a extensive new aquatics research facility, renovated greenhouse, and modernized vivarium that will permit the department of biology to develop new programs supporting wildlife restoration. The renovated facility is critical to enable the college to offer a graduate-level program in environmental sciences. The renovation will also include a modernized and expanded chemistry instrumentation facility that will permit the chemistry program to offer laboratory technician certifications.

The Science Renovation will also allow the college to establish new public and K-12 outreach programs. The current Science building has limited resources to support outreach activities. However, the renovation program includes a large teaching greenhouse that will be used for outreach events on weekends, in the summer, or whenever not being utilized for classes. The greenhouse itself will be embedded in a renovated central courtyard that is specifically designed to accommodate public engagement. When combined with the digital visualization theater and student engagement spaces created by phase 1 of this project, the Science Renovation will create an outward-facing educational physical space that will welcome community and especially K-12 students to engage in citizen science and public outreach with our students and faculty experts. We specifically plan to use this facility to bolster K-12 summer science programming designed to attract students to careers in STEM.

CATEGORY-SPECIFIC SCORING CRITERIA

1. Age of Building Since Last Major Remodel

Identify the number of years since the last substantial renovation of the facility or portion proposed for renovation. If only one portion of a building is to be remodeled, provide the age of that portion only. If the project involves multiple wings of a building that were constructed or renovated at different times, calculate and provide a weighted average facility age, based upon the gross square feet and age of each wing.

The existing Science Building was constructed in 1962 as a two-story 109,000 gross square-foot structure. A 39,200 gross square-foot addition was completed in 1989 and increased the total building area to 148,149 gross square feet. Additional minor cosmetic renovations were undertaken between 1990 and 1994. The weighted age of the building is 46.8 years, calculated as follows:

	Original Building	'89 Wing	Average Building Age	
Wing Age	58	32		
Wing GSF	109,000	39,149		
Total GSF	148,149	148,149		
Wing GSF/ Total GSF	0.736	0.264		
	Wing Weighted Age	Original Weighted Age	Total Weighted Age	
	39.7	7.1	=	46.8

2. Condition of Building

A. *Provide the facility's condition score (1 superior – 5 marginal functionality) from the 2016 comparable framework study, and summarize the major structural and systems conditions that resulted in that score. Provide selected supporting documentation in appendix, and reference them in the body of the proposal.*

The current physical condition of the Science Building ranks well below that of EWU's peer institutions and its age is more than double that of buildings at peer institutions. The 2015 State Facility Inventory System rates the existing Science Building's condition as "4 - Limited Functionality." This appears to be accurately coded given the significant issues with worn-out systems that require limited facility manpower to be scheduled to react to systems that are performing poorly or not at all.

Many of the critical systems that sustain the operation of the existing Science Building received individual condition scores of 4 with one (Controls and Instrumentation) received a 5. The average score of the building services section which includes HVAC, Electrical, and Plumbing systems was 3.4. This indicates that systems critical to health and safety, like fume hood ventilation, chemical storage ventilation, emergency showers, and uninterruptable power supply, are in desperate need of replacement, are near failure, or have already partially failed.

The average score of the equipment and furnishings section, which includes laboratory cabinetry and laboratory equipment, was 3.0. This score indicates that systems critical to accessibility and pedagogy like sinks, gas and air supply, and countertops are also in desperate need of replacement and are near failure or have already partially failed.

See Predesign Report - [Appendix A](#), Predesign Report's Building Mechanical Assessment, Appendix H– Building Electrical Assessment, Appendix I.

- B. Identify whether the building is listed on the Washington Heritage Register, and if so, summarize its historic significance.*

The Science Building is not listed on the Washington Heritage Register. In accordance with 2014, OFM Predesign requirements, an initial review of the project has been conducted by the Department of Archeology and Historic Preservation (DAHP) and a determination of “NOT ELIGIBLE” has been provided for the Science Building.

3. Significant Health, Safety, and Code Issues

It is understood that all projects that obtain a building permit will have to comply with current building codes. Identify whether the project is needed to bring the facility within current life safety (including seismic and ADA), or energy code requirements. Clearly identify the applicable standard or code and describe how the project will improve consistency with it. Provide selected supporting documentation in appendices, and reference them in the body of the proposal.

Applicable Building Codes for the project include 2015 International Building, Mechanical, and Fire Codes, ICC A117.1-2003, 2015 Uniform Plumbing Code, National Electrical Code NFPA 70, Washington State Energy Code, NFPA 13 and NFPA 72.

The Science Building's deficiencies are numerous, including:

Accessibility (ADA) Violations - Over 400 separate accessibility deficiencies were found in the existing Science Building during a comprehensive, campus-wide survey when comparing the project to ICC

A117.1-2003, as required by WAC 51-50. While most of the deficiencies are related to laboratory benches, sinks, doors, and restrooms, there are also large aquatics tanks located in a basement without elevator access or adequate accessible circulation space.

Health and Safety Issues - Health and safety problems are rampant throughout the building including: chemical storage without adequate ventilation and spill containment, an inability to isolate gas burners in labs, a lack of adequate distribution for inert gasses, and emergency showers without tempered water. Some fume hoods are not ventilated at night, some do not maintain acceptable face velocity, and pressures cannot be maintained in the labs during set back modes risking contamination to non-lab spaces.

HVAC Problems - Systems are 25-30 years old and beyond the normally expected service life. The Science Building contains noisy and inefficient heating, ventilating and air conditioning (HVAC) systems that cannot cope with the demands of air pressure differentials and air change rates required for the science activities that occur in the building. Air intakes are located at grade, drawing debris and insects into the inhabited areas of the building. Inadequate airflow, cooling, and humidification from the mechanical system prevents spaces such as the Vivarium from utilizing modern ventilated cages which would protect animal health. Additionally, current use of individual exhaust fans for each fume hood has created numerous roof penetrations, which have contributed to leaks in the building. Past roof leaks have

impacted the use of teaching and research spaces until they can be restored and have increased the maintenance costs of the building.

Vibration Control - VAC systems vibrate the building's structure, radiating noise throughout teaching spaces; noise levels in some labs were so high, they exceeded the acceptable decibel level for instruction.

Electrical Issues - Due to the age of the existing electrical distribution equipment in the existing Science Building, it has become difficult to obtain parts. Additionally, safety standards have changed in the 25 years since the existing equipment was installed and improvements have been made since that time.

Some locations in below grade mechanical rooms show signs of water damage and some of the original 1960 service equipment still in use is no longer safe to service. Replacement of the distribution system, lighting systems, audio visual, communications, and emergency distribution systems are required. Fire alarm systems will need to be modified to accommodate the renovated space needs. Also, the existing emergency generator does not meet the 2015 National Electric Code for separation of emergency and standby loads, thereby requiring modification to the system.

Seismic Issues - Several items were in an ASCE 41-13 Seismic Evaluation and Retrofit of Existing Buildings Tier 1 Analysis. It is recommended that the following deficiencies be corrected with a significant renovation:

The structural walls parallel to the roof framing are not properly attached to the roof diaphragms. Historical data shows that improperly anchored walls can fall away from a building during an earthquake. Several of the interior shear walls do not extend the full width of the building, and drag struts should be added to the roof to collect and deliver lateral forces from the roof diaphragm to the shear walls. Proper drag struts should be added to the roof diaphragm around openings/discontinuities at the planetarium, and around the mechanical penthouse. The original building currently has two seismic joints which are approximately 2" wide. This gap does not meet recommended building separation. Further analysis is necessary, but the joint may need to be widened to prevent the buildings from pounding on one another during an earthquake. Any equipment used to power or control life safety systems must be properly anchored or braced.

Energy Code Requirements/Cost of Energy - The existing Science Building is currently the largest energy user on the campus at EWU at 13.7% of the total campus energy used, which is large considering the building only accounts for 5.4% of the total campus square footage. While it is normal for science buildings to have a large use of campus energy, renovating the existing Science Building would have a very positive impact on campus energy costs. It is anticipated that the new-programmed uses in the Science Building will require less than half of the current exhaust currently provided in the facility so equipment replacement and upgraded control systems will significantly improve the energy performance of this building. Reprogramming the uses within the building will result in modifications to most of the above ceiling mechanical systems such as ductwork, branch piping and air terminal units.

Renovation of the Science Building will address the health, safety, accessibility, welfare, and energy code issues currently present in the facility.

4. Reasonableness of Cost

Provide as much detailed cost information as possible, including baseline comparison of costs per square foot (SF) with the cost data provided in Chapter 5.0 of the Higher Education Capital Project Scoring Process Instructions and a completed OFM C-100 form. Also, describe the construction methodology that will be used for the proposed project.

The Science Renovation project will be delivered via the Design-Bid-Build methodology. The University requests \$58,000,000.00 in State Capital funds for the total project cost for Construction Phase 2 of the Science Renovation Project. See Appendix B C-100 form.

OFM provides guidelines for facility types are incorporated in the Science Renovation project. See Appendix C – for the Reasonableness of Cost Template.:

The detailed construction cost estimate for Phase 2 of the Science Renovation, escalated to the midpoint of construction (November 2024), predicts the escalated maximum allowable construction cost be \$41,394,058, which equates to a unit cost of **\$569 per gross square foot**. *This falls near OFM's expected cost of \$685 per gross square foot for escalated construction cost as calculated in the Reasonableness of Cost template – Appendix C.* Science Renovation funds are being requested over four biennia as follows:

Funding Phase	Biennium	Amount
Pre-design, Phase I and II	2015 – 2017	\$263,274
Phase I & II Design	2019 – 2021	\$7,937,000
Phase I Construction	2021 – 2023	\$45,000,000
Phase II Construction	2023 – 2025	\$58,000,000
TOTAL		\$111,200,274

If applicable, provide Life Cycle Cost Analysis results demonstrating significant projected savings for selected system alternates (Uniformat Level II) over 50 years, in terms of net present savings.

The Life Cycle Costs Analysis (LCCA) was completed using the Life Cycle Cost Tool (LCCT) Excel spreadsheets issued with the July 2014 State of Washington Pre-design Manual. The design team worked collaboratively to estimate construction costs of the three items with associated energy performance and maintenance of the systems studied. The tool computes the total economic life cycle costs (LCC) of the system options as well as the Societal Life Cycle Costs, which considers the tons of CO₂ production over the 50-year study period. A complete summary of the options studied, as well as a narrative of associated findings, are found in the Pre-design Report. See Appendix A, Section 9: G - Executive Summary from the Life Cycle Cost Analysis process.

5. Availability of Space/ Utilization on Campus – Appendix E

Describe the institution's plan for improving space utilization and how the project will impact the following:

A. The utilization of classroom space

Contact Hrs per Week: 88,173 Seating Capacity (Seats): 6,083 Seat Utilization Hrs/wk 12.3

B. The utilization of class laboratory space

Contact Hrs per Week: 24,213 Seating Capacity (Seats): 1,805 Seat Utilization Hrs/wk 11.4

6. Efficiency of Space Allocation

A. *For each major function in the proposed facility (classroom, instructional labs, offices), identify whether space allocations will be consistent with Facility Evaluation and Planning Guide (FEPG) assignable square feet standards. To the extent any proposed allocations exceed FEPG standards, explain the alternative standard that has been used, and why. See Chapter 4 of the Project Evaluation Guidelines for an example. Supporting tables may be included in an appendix.*

Reference materials used in creation of the program for the Science Building Renovation include:

- Facilities Evaluation and Planning Guide (FEPG), Inter-institutional Committee of Space Officers representing the public four-year colleges and university in the state of Washington, 1994
- Post-Secondary Education Facilities Inventory and Classification Manual (FICM), National Center for Education Statistics, 2006

All major functions comply with the above FEFG and/or FICM standards. Detailed breakout of Phase 1 and 2 spaces is provided in the Predesign Report, Appendix A. See Phase 2 Allocation – Appendix F.

B. Identify the following on form CBS002:

1. Usable square feet (USF) in the proposed facility
2. Gross square feet (GSF)
3. Building efficiency (USF divided GSF).

Science Renovation - Phase I	
Usable/Assignable Square Feet	51,941
Gross Square Feet	72725
Net Building Efficiency	71.40%

7. Adequacy of Space

Describe whether and the extent to which, the project is needed to meet modern educational standards and/or to improve space configurations, and how it would accomplish that.

Lack of Student Space – The existing Science Building has none of the non-classroom space that would “create an environment where students succeed at their highest level” as seen in the University’s strategic plan. Open computer labs are few in number and are a highly sought after resource for students. Informal student gathering spaces which promote collaboration and study are completely absent from the building. Reasonable corridor widths, which could ordinarily provide areas of informal student use, have been retrofitted with obtrusive duct shafts and display scientific collections - both uses which inhibit the ability to utilize the space for gathering and create overcrowding conditions during the transition time between classes.

Building Condition – The current physical condition of the Science Building ranks well below that of EWU’s peer institutions and its age is more than double that of buildings at peer institutions. This puts EWU at a competitive disadvantage in the current educational market.

Technology Deficiencies – The current building is inadequate for supporting the technology needs of EWU. Some of these issues are inherent in the design of a building that could not predict network connectivity. Access to cable infrastructure is more difficult than a modern lab building limiting the flexibility to make quick changes. Research labs are heavily data driven and the importance of integrating technology into research is only increasing.

The Science Renovation project reflects efforts to increase instructional productivity, leverage existing square footage, optimize the use of existing facilities, and create the potential for collaboration between students and academic departments. The project will also directly foster excellence in learning by improving and expanding research and teaching facilities, thereby increasing opportunities for undergraduate and graduate student research. Additionally, the project fosters individual student-faculty interaction through the incorporation of collaboration/informal learning spaces, and through the building’s connection to the adjacent Interdisciplinary Science Center (ISC).

Upon Completion of Phase I and Phase II, the Science Renovation Project will achieve the following goals:

- Meet EWU’s and the Science Programs projected growth in STEM and Healthcare related professions.
- Address a shortage of suitable classroom, office, research and lab space within the science department, and create student interaction/collaborative spaces throughout the new Science Renovation project.
- Teaching, research and lab support spaces need to be updated to meet current programmatic needs.
- Encourage collaboration and synergy across departments; promote increased flow and movement between the Science Building Renovation and new Interdisciplinary Science Center Building.



Appendices

Supporting Reference Data

Appendix A - Predesign Study EWU Science Building Renovation

Available at the following website address:

https://inside.ewu.edu/facilities/ewu-science-building-renovation-predesign-study_july-2016_final/

<p>Predesign Study</p> <p>Eastern Washington University Science Building Renovation</p>  <p>Prepared for: State of Washington Office of Financial Management</p> <p>By: Eastern Washington University Construction and Planning Services in cooperation with Integrus Architecture</p> <p>Integrus Project No. 21534.01</p> <p>July 2016</p> 	<p style="text-align: right;">table of contents</p> <p>Section 1 Executive Summary</p> <p>Section 2 Project Analysis</p> <p>2.1 Discussion of Operational Needs</p> <p>2.2 Discussion of Alternatives</p> <p>2.3 Discussion of Selected Alternative</p> <p>2.4 Summary of LCCA Results Using the LCCT</p> <p>2.5 Identification of Issues</p> <p>2.6 Prior Planning and History</p> <p>2.7 Stakeholders</p> <p>2.8 Project Description</p> <p>2.9 Implementation Approach</p> <p>2.10 Project Management</p> <p>2.11 Schedule</p> <p>Section 3 Program Analysis</p> <p>3.1 Assumptions</p> <p>3.2 Functions and FTEs</p> <p>3.3 Spatial Relationships Between the Facility and Site</p> <p>3.4 Interrelationships and Adjacencies of Functions</p> <p>3.5 Major Equipment</p> <p>3.6 Future Needs and Flexibility/Special Systems Such as Environmental, Information Technology, etc.</p> <p>3.7 Sustainability, Energy Use and Greenhouse Gas Emissions Reduction</p> <p>3.8 Applicable Codes and Regulations</p> <p>Section 4 Site Analysis</p> <p>4.1 Potential Sites</p> <p>4.2 Building Footprint</p> <p>4.3 Site Considerations Such as Physical, Regulatory and Access Issues</p> <p>4.4 Acquisition Process</p> <p>Section 5 Project Budget Analysis</p> <p>5.1 Assumptions</p> <p>5.2 Detailed Estimates</p> <p>5.3 Funding Sources</p> <p>5.4 Project Cost Estimate</p> <p>5.5 Summary of LCCA Results Using the LCCT</p> <p>5.6 Funding Methods</p> <p>5.7 Sign-off by Agency</p> <p>Section 6 Master Plan and Policy Coordination</p> <p>6.1 Impacts to Existing Plans</p> <p>6.2 Adherence to Significant State Policies</p> <p>Section 7 Facility Operations and Maintenance Requirements</p> <p>7.1 Assumptions</p> <p>7.2 Operating Costs in Table Form</p> <p>7.3 Staffing Plan (Capital and Operating)</p> <p style="text-align: right;">EASTERN WASHINGTON UNIVERSITY - SCIENCE BUILDING RENOVATION PREDESIGN STUDY</p>
---	---

Appendix B - C100 Project Cost Estimate Report

C-100(2022)

Updated June 2022

Quick Start Guide

GENERAL INFORMATION

- 1) The intended use of the C-100(2022) is to enable project managers to communicate their project cost estimates to budget officers in the standard format required for capital project budget requests/submittals to OFM.
- 2) This workbook is protected so that the worksheets within it cannot be moved or deleted in the usual manner. This protection is necessary to ensure that the cost estimate details and formulas align with the estimating application in the Capital Budgeting System.
- 3) The estimating format to develop the maximum allowable construction cost (MACC) is presented in Uniformat II.
- 4) Form-calculated costs such as A/E Basic Design Service fees and Agency Project Management costs are dependent on other estimated project costs such as MACC, equipment, etc.
- 5) Project estimates generated with this tool are not sufficient for budget request submittals to OFM. Use the Capital Budgeting System to submit capital project budget requests and attach the C-100 form.
- 6) Contact your assigned OFM Capital Budget Analyst with questions.

[OFM Capital Budget Analyst](#)

INSTRUCTIONS

- 1) Only green cells are available for data entry.
- 2) Fill in all known cells in the 'Summary' tab prior to moving on to the cost entry tabs A-G.
- 3) It is recommended, but not required, to fill out cost entry tabs in the following order:
A. Acquisition, C. Construction Contracts, D. Equipment, G. Other Costs, B. Consultant Services, F. Project Management, then E. Artwork.
- 4) If additional rows are inserted to capture additional project costs, a description must be provided in the Notes column or within Tab H. Additional Notes. Be particularly detailed for additional costs estimated for contingencies and project management.

FORM-CALCULATED COSTS (FEE CALCULATIONS)

- 1) A/E Basic Design Services: $AE\ Fee\ \% (x) (MACC + Contingency)$
- 2) Design Services Contingency: $Contingency\ \% (x) Consultant\ Services\ Subtotal$
- 3) Construction Contingency: $Contingency\ \% (x) MACC$
- 4) Artwork: $0.5\% (x) Total\ Project\ Cost$
- 5) Agency Project Management (Greater than \$1million): $(AE\ Fee\ \% - 3\%) (x) (Acquisition\ Total + Consultant\ Services\ Total + MACC + Construction\ Contingency + Other\ Costs)$

STATE OF WASHINGTON
AGENCY / INSTITUTION PROJECT COST SUMMARY

Updated June 2022

Agency		
Project Name		
OFM Project Number		

Contact Information

Name		
Phone Number		
Email		

Statistics

Gross Square Feet	72,725	MACC per Gross Square Foot	\$509
Usable Square Feet	51,941	Escalated MACC per Gross Square Foot	\$569
Alt Gross Unit of Measure			
Space Efficiency	71.4%	A/E Fee Class	A
Construction Type	Laboratories (Research)	A/E Fee Percentage	10.50%
Remodel	Yes	Projected Life of Asset (Years)	50

Additional Project Details

Procurement Approach	DBB	Art Requirement Applies	Yes
Inflation Rate	4.90%	Higher Ed Institution	Yes
Sales Tax Rate %	8.90%	Location Used for Tax Rate	3,202
Contingency Rate	10%		
Base Month (Estimate Date)	August-22	OFM UFI# (from FPMT, if available)	
Project Administered By	Agency		

Schedule

Predesign Start	January-16	Predesign End	July-16
Design Start	January-20	Design End	October-21
Construction Start	April-24	Construction End	August-25
Construction Duration	16 Months		

Green cells must be filled in by user

Project Cost Estimate

Total Project	\$52,026,401	Total Project Escalated	\$58,009,296
		Rounded Escalated Total	\$58,009,000

Cost Estimate Summary

Acquisition

Acquisition Subtotal	\$0	Acquisition Subtotal Escalated	\$0
-----------------------------	------------	---------------------------------------	------------

Consultant Services			
Predesign Services	\$0		
Design Phase Services	\$510,000		
Extra Services	\$420,000		
Other Services	\$1,399,929		
Design Services Contingency	\$221,343		
Consultant Services Subtotal	\$2,551,272	Consultant Services Subtotal Escalated	\$2,742,909

Construction			
Maximum Allowable Construction Cost (MACC)	\$37,032,703	Maximum Allowable Construction Cost (MACC) Escalated	\$41,394,058
DBB Risk Contingencies	\$0		
DBB Management	\$0		
Owner Construction Contingency	\$3,518,107		\$3,933,948
Non-Taxable Items	\$0		\$0
Sales Tax	\$3,609,022	Sales Tax Escalated	\$4,034,193
Construction Subtotal	\$44,159,832	Construction Subtotal Escalated	\$49,362,199

Equipment			
Equipment	\$3,150,000		
Sales Tax	\$280,350		
Non-Taxable Items	\$0		
Equipment Subtotal	\$3,430,350	Equipment Subtotal Escalated	\$3,835,818

Artwork			
Artwork Subtotal	\$288,603	Artwork Subtotal Escalated	\$288,603

Agency Project Administration			
Agency Project Administration Subtotal	\$1,946,344		
DES Additional Services Subtotal	\$0		
Other Project Admin Costs	-\$500,000		
Project Administration Subtotal	\$1,446,344	Project Administration Subtotal Escalated	\$1,617,302

Other Costs			
Other Costs Subtotal	\$150,000	Other Costs Subtotal Escalated	\$162,465

Project Cost Estimate			
Total Project	\$52,026,401	Total Project Escalated	\$58,009,296
		Rounded Escalated Total	\$58,009,000

Funding Summary

	Project Cost (Escalated)	Funded in Prior Biennia	New Approp Request 2023-2025	2025-2027	Out Years
Acquisition					
Acquisition Subtotal	\$0				\$0
Consultant Services					
Consultant Services Subtotal	\$2,742,909		\$2,742,909		\$0
Construction					
Construction Subtotal	\$49,362,199		\$49,362,199		\$0
Equipment					
Equipment Subtotal	\$3,835,818		\$3,835,818		\$0
Artwork					
Artwork Subtotal	\$288,603		\$288,603		\$0
Agency Project Administration					
Project Administration Subtotal	\$1,617,302		\$1,617,302		\$0
Other Costs					
Other Costs Subtotal	\$162,465		\$162,465		\$0
Project Cost Estimate					
Total Project	\$58,009,296	\$0	\$58,009,296	\$0	\$0
	\$58,009,000	\$0	\$58,009,000	\$0	\$0
Percentage requested as a new appropriation			100%		

What is planned for the requested new appropriation? (Ex. Acquisition and design, phase 1 construction, etc.)

Insert Row Here

What has been completed or is underway with a previous appropriation?

Insert Row Here

What is planned with a future appropriation?

Insert Row Here

Cost Estimate Details

Acquisition Costs

Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Purchase/Lease					
Appraisal and Closing					
Right of Way					
Demolition					
Pre-Site Development					
Other					
Insert Row Here					
ACQUISITION TOTAL	\$0		NA	\$0	

Green cells must be filled in by user

Cost Estimate Details

Consultant Services				
Item	Base Amount	Escalation Factor	Escalated Cost	Notes
1) Pre-Schematic Design Services				
Programming/Site Analysis				
Environmental Analysis				
Predesign Study				
Other				
Insert Row Here				
Sub TOTAL	\$0	1.0000	\$0	Escalated to Design Start
2) Construction Documents				
A/E Basic Design Services	\$2,937,906			69% of A/E Basic Services
Phase 2 (80% complete)	-\$2,937,906			
Design completion	\$510,000			
Sub TOTAL	\$510,000	1.0000	\$510,001	Escalated to Mid-Design
3) Extra Services				
Civil Design (Above Basic Svcs)				
Geotechnical Investigation	\$25,000			
Commissioning	\$195,000			
Site Survey				
Testing	\$50,000			
LEED Services				
Voice/Data Consultant				
Value Engineering				
Constructability Review				
Environmental Mitigation (EIS)	\$150,000			
Landscape Consultant				
Other				
Insert Row Here				
Sub TOTAL	\$420,000	1.0000	\$420,000	Escalated to Mid-Design
4) Other Services				
Bid/Construction/Closeout	\$1,319,929			31% of A/E Basic Services
HVAC Balancing	\$80,000			
Staffing				
Other				
Insert Row Here				
Sub TOTAL	\$1,399,929	1.1182	\$1,565,401	Escalated to Mid-Const.
5) Design Services Contingency				
Design Services Contingency	\$221,343			
Other				
Insert Row Here				
Sub TOTAL	\$221,343	1.1182	\$247,507	Escalated to Mid-Const.

CONSULTANT SERVICES TOTAL		
\$2,551,272		\$2,742,909

Green cells must be filled in by user

Cost Estimate Details

Construction Contracts					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Site Work					
G10 - Site Preparation	\$51,283				
G20 - Site Improvements	\$365,161				
G30 - Site Mechanical Utilities	\$15,650				
G40 - Site Electrical Utilities	\$18,109				
G60 - Other Site Construction	\$3,114				
Other					
Insert Row Here					
Sub TOTAL	\$453,317		1.0831	\$490,988	
2) Related Project Costs					
Offsite Improvements					
City Utilities Relocation					
Parking Mitigation					
Stormwater Retention/Detention					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.0831	\$0	
3) Facility Construction					
A10 - Foundations	\$175,762				
A20 - Basement Construction					
B10 - Superstructure	\$467,138				
B20 - Exterior Closure	\$1,388,958				
B30 - Roofing	\$1,059,590				
C10 - Interior Construction	\$1,892,282				
C20 - Stairs	\$25,150				
C30 - Interior Finishes	\$2,174,490				
D10 - Conveying	\$60,000				
D20 - Plumbing Systems	\$2,733,330				
D30 - HVAC Systems	\$10,850,228				
D40 - Fire Protection Systems	\$317,750				
D50 - Electrical Systems	\$4,905,341				
F10 - Special Construction					
F20 - Selective Demolition	\$1,276,000				
General Conditions	\$992,000				
Greenhouse	\$976,227				
Panel Replacement	\$726,543				
Non-lab casework	\$233,340				
Built-in Lab	\$3,162,572				
Synthetic lab	\$942,710				
O&P	\$2,219,975				
Sub TOTAL	\$36,579,386		1.1182	\$40,903,070	

4) Maximum Allowable Construction Cost

MACC Sub TOTAL
\$509

\$569 per GSF

This Section is Intentionally Left Blank

7) Owner Construction Contingency

Allowance for Change Orders

Other

Insert Row Here

Sub TOTAL

8) Non-Taxable Items

Other

Insert Row Here

Sub TOTAL

9) Sales Tax

Sub TOTAL

CONSTRUCTION CONTRACTS TOTAL

Green cells must be filled in by user

Cost Estimate Details

Equipment					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Equipment					
E10 - Equipment	\$1,200,000				
E20 - Furnishings	\$1,200,000				
F10 - Special Construction					
OFOI Telecom	\$310,000				
Audio/Visual	\$230,000				
Security	\$150,000				
NMR move	\$60,000				
Sub TOTAL	\$3,150,000		1.1182	\$3,522,330	
2) Non Taxable Items					
Other					
Insert Row Here					
Sub TOTAL	\$0		1.1182	\$0	
3) Sales Tax					
Sub TOTAL	\$280,350			\$313,488	
EQUIPMENT TOTAL					
	\$3,430,350			\$3,835,818	

Green cells must be filled in by user

Cost Estimate Details

Artwork					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Artwork					
Project Artwork	\$0				0.5% of total project cost for new construction
Higher Ed Artwork	\$288,603				0.5% of total project cost for new and renewal construction
Other					
Insert Row Here					
ARTWORK TOTAL	\$288,603		NA	\$288,603	

Green cells must be filled in by user

Cost Estimate Details

Project Management					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
1) Agency Project Management					
Agency Project Management	\$1,946,344				
Additional Services					
Other	-\$500,000				
Insert Row Here					
<i>Subtotal of Other</i>	-\$500,000				
PROJECT MANAGEMENT TOTAL	\$1,446,344		1.1182	\$1,617,302	

Green cells must be filled in by user

Cost Estimate Details

Other Costs					
Item	Base Amount		Escalation Factor	Escalated Cost	Notes
Mitigation Costs					
Hazardous Material Remediation/Removal					
Historic and Archeological Mitigation					
Facilities Services	\$150,000				
Insert Row Here					
OTHER COSTS TOTAL	\$150,000		1.0831	\$162,465	

Green cells must be filled in by user

C-100(2022)
Additional Notes

Tab A. Acquisition

<i>Insert Row Here</i>

Tab B. Consultant Services

<i>Insert Row Here</i>

Tab C. Construction Contracts

<i>Insert Row Here</i>

Tab D. Equipment

<i>Insert Row Here</i>

Tab E. Artwork

<i>Insert Row Here</i>

Tab F. Project Management

<i>Insert Row Here</i>

Tab G. Other Costs

<i>Insert Row Here</i>

Appendix C – Reasonableness of Cost Template

Reasonableness of Cost Template

Project name: CBS/OFM Project #:
 Institution: Scoring category:
 Campus/Location:

	Construction Begin	Construction End	Construction mid-point	Escalation Multiplier
Construction mid-point:	March-24	August-25	November-24	1.3613

MACC from C-100:

	Expected MACC/GSF in 2019	Expected MACC/GSF	GSF by type	Expected MACC
Classrooms	\$405	\$551	-	\$0
Instructional labs	\$397	\$540	6,653	\$3,595,631
Research labs	\$545	\$742	50,810	\$37,697,524
Administration	\$406	\$553	11,620	\$6,422,429
Libraries	\$340	\$463	-	\$0
Athletic	\$385	\$524	-	\$0
Assembly, exhibit and meeting rooms	\$428	\$583	3,642	\$2,122,027
			72,725	\$49,837,610

C-100 to expected MACC variance:

Score:

Appendix D – Overarching Criteria: Degree Totals and Targets Template

Overarching Criteria: Degree Totals and Targets Template

Project name: Science Building Renovation - Phase 2 CBS/OFM Project #: 40000150
 Institution: Eastern WA University Scoring category: Renovation - Major
 Campus/Location: Cheney, Washington

		Bachelor degrees	Bachelor degree's in high-demand fields	Advanced degrees
2020-21 Public Four-Year Dashboard		2,278	936	893
Additional degrees generated by project		456	350	75
Projected degrees with building project	a	2,734	1,286	968
Projected growth above 2020-21 actual degree		20.0%	37.4%	8.4%
Number of degrees targeted in 2023	b	1,750	642	961
Projected degrees as % of 2023 target	b/a =	64.0%	49.9%	99.3%

Score:

2	3	1
---	---	---

Comments:

New labs permit expansion of existing Biology graduate program and addition of graduate programs in Environmental Science and Chemistry/Biochemistry. This will add 75 new graduate students (average of ~2.5 per lab). Current First-time in college enrollments are increasing 5% per year at EWU, and EWU Running Start enrollments are increasing 10-15% per year. Over the period of the project we project that this will yield a 20% increase in Bachelor degree productivity.

Appendix E – Availability of Space/Campus Utilization Template

Availability of Space/Campus Utilization Template

Project name: CBS/OFM Project #:

Institution: Scoring category:

Campus/Location:

Enrollment

2021 fall on-campus student pected 2022 fall on-campus student FTE:

% increase budgeted:

Enter the average number of hours per week each for (a) classroom seat and (b) classroom lab is expected to be utilized in Fall 2022 for the campus where the project is located.

(a) General University Classroom Utilization		(b) General University Lab Utilization	
Fall 2021 Weekly Contact Hours	88,173	Fall 2021 Weekly Contact Hours	24,213
Multiply by % FTE Increase Budgeted	-15.00%	Multiply by % FTE Increase Budgeted	-15.00%
Expected Fall 2022 Contact Hours	74,943	Expected Fall 2022 Contact Hours	20,580
Expected Fall 2022 Classroom Seats	6,083	Expected Fall 2022 Class Lab Seats	1,805
Expected Hours per Week Utilization	12.3	Expected Hours per Week Utilization	11.4
HECB utilization standard (hours/GUC seat)	22.0	HECB utilization standard (hour/GUL seat)	16.0
Difference in utilization standard	-44.0%	Difference in utilization standard	-28.7%

If the campus does not meet the 22 hours per classroom seat and/or the 16 hours per class lab HECB utilization standards, describe any institutional plans for achieving the utilization standard.

Appendix F – Program Related Space Allocation Template

Program Related Space Allocation Template

Project name: CBS/OFM Project #:
 Institution: Scoring category:
 Campus/Location:

Enter the assignable square feet for the proposed project for the applicable space types:

Type of Space	Points	Assignable Square Feet	Percentage of total	Score [Points x Percentage]
Instructional space (classroom, laboratories)	10	3,714	7.15	0.72
Research space	2	27,947	53.81	1.08
Office space	4	6,394	12.31	0.49
Library and study collaborative space	10	2,009	3.87	0.39
Other non-residential space	8	1,496	2.88	0.23
Support and physical plant space	6	10,381	19.99	1.20
Total:		51,941	100.0	4.10

1. Appendix G – Greenhouse Gas Reduction Policy



Eastern Washington University Greenhouse Gas Reduction Policy March 1, 2020

Purpose: The purpose of the policy is to set forth EWU’s commitment to reducing greenhouse gas within the area of campus operations and guide the university towards a collective goal of Washington State government agencies achieving carbon neutrality in 2050. This policy sets the greenhouse gas reduction standards for managing greenhouse gas emissions at Eastern Washington University and brings EWU in line with Washington State Legislation under RCW 70.235.

History: EWU is committed to reducing greenhouse gas emissions and reducing our impact on climate change. EWU is a signatory of the American College and University Presidents Climate Commitment, developed its first campus Sustainability Plan in 2012, and created the Office of Sustainability with the hiring of our first Sustainability Coordinator in 2016. EWU seeks to further these efforts by developing Sustainability focused policies that decrease our carbon footprint and other environmental impacts. In 2020 the Washington State Legislature passed HB 2311 that amends RCW 70.235 and strengthens the State’s commitment to reducing greenhouse gas emissions with the goal to become carbon neutral by 2050. This policy is intended to align EWU’s commitment to carbon emission reductions with Washington State policy and provide guidance as EWU progresses towards near carbon neutrality.

- I. **Policy** – As part of its role as a State agency, EWU will work to meet the statewide greenhouse gas emission limits established in RCW 70.235.020:
 - i. Year 2030 – Reduce greenhouse gas emissions by 45 % below 2005 levels
 - ii. Year 2040 – Reduce greenhouse gas emissions by 70 % below 2005 levels
 - iii. Year 2050 – Reduce greenhouse gas emissions by 95 % below 2005 levels; and support the collective goal of achieving net zero greenhouse gas emissions by the Washington State government agencies as a whole.
- II. **Policy Review** – This policy will be reviewed annually and updated to reflect changes in Washington State Legislation as well as Eastern Washington University policies. The EWU Office of Sustainability will be tasked with the annual review and proposing updates to the policy as necessary.
- III. **Greenhouse gas monitoring and reporting** – The Office of Sustainability is tasked with tracking greenhouse gas emissions and providing biannual reports to the State Efficiency and Environmental Performance Office at the Department of Commerce. As defined in RCW 70.235.050, these biannual reports will document steps taken in the previous biennium as well as actions planned for the next two biennia and long-term strategies to meet emission reduction targets. Reports will be submitted every two years, beginning in 2022, on June 1st of even numbered years to the Department of Commerce. Additionally, the Office of Sustainability will provide annual greenhouse gas reduction reports to the EWU VP of Business and Finance.