**Resolution for the Renovation and Addition of the Natural Science Building**

**Resolution passed by the SUNY Old Westbury Faculty Senate,**

**at the Faculty Senate Meeting of December 10, 2021**

**PREAMBLE**

The Natural Science Building (NSB) was built in 1985 to serve SUNY Old Westbury’s growing enrollment in the sciences. At that time, there were only 16 faculty serving two majors, Biological Sciences and Community Health, and Chemistry & Physics. Today, the use of the original NSB facility over the last 36 years has more than doubled. The building now houses 32 faculty that serves three departments, seven majors and 13 degree programs. Faculty from these departments and those outside of the NSB (e.g., Psychology) also conduct basic research and mentor students within the same facility. The undergraduate students that are primarily served in the NSB include the Biological Sciences, Biochemistry, Chemistry and Public Health majors. The faculty that currently teach and conduct basic research within the NSB include the Biological Sciences, Chemistry & Physics, Public Health, and Psychology Departments.

To better serve the students in these majors and to promote interdisciplinary curriculum, the sciences have implemented evidence-based pedagogy that includes course-embedded undergraduate research experiences (CUREs) and applied learning practices. Both CUREs and other applied learning practices have been well documented in the literature with evidence supporting increased retention and graduation rates, procedural skills, and success postgraduation in being accepted into graduate/professional degree programs and employment within the STEM fields. Implementing CUREs and other applied learning practices within the laboratory curriculum requires many resources that is largely supported and facilitated by faculty research. To date, at least 14 courses offered by the Biological Sciences Department and 5 courses offered by the Chemistry & Physics Department employ such methods of instruction in their laboratory courses. Despite the frequent costly repairs, the aging infrastructure, the lack of resources, the large growth of faculty and student researchers, and space constraints, the dedicated faculty have shown a consistent record of success with their student learning outcomes. Historically, SUNY Old Westbury graduates have successfully gone on to health professional or science careers. In the past two decades, ~22% of our graduates were accepted into PhD degree programs, ~25% continued in MS degree programs, and within the last 5 years ~52% of all pre-health applicants to medical, veterinary, and dental schools were accepted into their programs. The graduation gap between URMs and non-URMs are also narrower compared to the national average (~45% of graduating students in the last 5 years are URM).However, the many constraints prohibit faculty and students from achieving equitable and optimal learning outcomes that are consistent with preparing students for a competitive global job market in the STEM fields

**RESOLUTION FOR THE RENOVATION AND ADDITION OF THE NATURAL SCIENCE BUILDING**

*Whereas,* despite the COVID-19 pandemic, enrollment in the science majors (i.e., Biological Sciences, Chemistry, and Biochemistry) at SUNY Old Westbury has continuously grown since the inception of the building in 1985, with the largest student body recorded in the history of the College during 2021-2022; and

*Whereas,* continued enrollment in the sciences further drives the College’s revenue stream; and

*Whereas,* the growth in the sciences has exceeded the College’s projections for instructional and research space in the NSB 3 years earlier than expected; and

*Whereas,* the new projected growth by 2028 is expected to increase 41.3% in Biological Sciences, 26.5% in Public Health, and 32.0% in Chemistry/Physics majors, as verified by the Provost in the 2016 Program Study for the Natural Science Building; and

*Whereas,* enrollment in science courses is consistently over tallied in excess of the maximal classroom and/or laboratory capacity further placing less than optimal constraints for both faculty and students in the sciences; and

*Whereas,* implementing CUREs or adding more laboratory courses in response to student demand and modern procedural learning consistent with job market ready skills is not possible; and

*Whereas,* due to the limited resources, lack of modern equipment, inadequate research spaces, and the limited number of faculty and staff supports along with instructional support results in a reduction of educational quality that are critical for student success; and

*Whereas,* students majoring in the STEM fields regularly experience long waitlists with the hopes to be enrolled in required courses that delay their time to graduation and result in risks for attrition; and

*Whereas,* SUNY Old Westbury has developed new degree programs in the STEM fields, (i.e., Bachelor’s of Science in Bioinformatics and Computational Science, and Physics) in addition to articulation programs, including: 1) 3+4 BS/DO Program with the New York Institute of Technology College of Osteopathic Medicine (NYITCOM); 2) 4+4 Early Interview Program with the New York Institute of Technology College of Osteopathic Medicine (NYITCOM); 3) 3+4 BS/DPM Program with the New York College of Podiatric Medicine (NYCPM) ; 4) 4+4 Early Interview Program with the New York College of Podiatric Medicine (NYCPM); and 5) Bachelor of Science with Physical Therapy, Physician’s Assistant, and Nursing with SUNY Downstate; that further increases demand for resources and space in the NSB; and

*Whereas,* the sciences also serves the greater Old Westbury student body through the general education requirements of 1 science course and the School of Education majors specializing in science tracks at both the undergraduate and graduate levels; and

*Whereas,* the hiring of new faculty and staff required to meet the demand of the ongoing increased enrollment has resulted in additional challenges in allocating very limited faculty research spaces for both teaching and professional development. The latter disproportionately and negatively affect new hire faculty on the tenure-track that are expected to develop independent research programs; and

*Whereas,* the current “interior finishes and building systems have exceeded their useful life and should be replaced” as per the 2016 Capital Planning study, and the occupational working conditions have become dangerous to students, faculty, and staff (i.e., mold, leaks, temporary/inconsistent HVAC systems, increased risk for failing New York state inspections); and

*Whereas,* the disrepair, aging, and hazardous NSB infrastructural issues consistently disrupt student learning and student research experiences; and

*Whereas,* the critical infrastructural issues have disrupted and destroyed on-going faculty research, prevent faculty professional development, and reduce the probability for obtaining solid data to publish their work with our students; and

*Whereas,* the critical infrastructural issues reduces the probability for faculty to obtain federal extramural funding that also has the potential to increase college revenue, obtain modern research equipment, and provide students with research experience in preparation for the next educational level and global job market; and

*Whereas,* the initially proposed capital planning for the NSB included an addition and renovation, which was reduced to a stand-alone full renovation to occur in two phases. Presently, the renovation plans have now been further reduced to starting Phase 1 renovation without a guarantee of completion with a Phase 2; and

*Whereas,* this new renovation plan lacks consideration of the current overgrowth of students and faculty, lack of modern and adequate teaching and research spaces, and concerns with the health and safety of students and faculty; and

*Whereas,* this new renovation plan aims to use a large portion of capital funds on temporary teaching and research spaces without any well-defined solution for spaces needed between Phase 1 and Phase 2 or consideration for a permanent addition to the NSB to support the overgrowth of student and faculty and the continued upward projections of student enrollment; and

*Whereas,* the implementation of the proposed renovation plans will increase the risk for a reduction in student enrollment in the sciences and less than optimal teaching environments throughout the duration of the proposed renovations; and

*Whereas,* SUNYOld Westbury’s high rates of successfully graduating URM STEM majors benefits the SUNY-system and New York State as a whole; and

*Whereas,* other SUNY institutions are allocated capital funds to support science building renovations and additions to a larger extent than what has been proposed for SUNY Old Westbury, and thus creates an inequitable and unfair education experience for Old Westbury students in comparison to other campuses.

*Therefore, Be It Resolved* that the College’s administration prioritize a thoughtful and least disruptive renovation of the Natural Science Building that addresses the disrepair, aging, and hazardous infrastructural issues that will result in the following: 1. Continue to increase URM enrollment and representation in the STEM fields; 2. Accommodate the use of CUREs and applied learning practices to increase student procedural skills preparing them for a competitive global job market; 3. Propel faculty success in obtaining extramural funding to benefit students, faculty, and the college; and 4. Minimize the disruptions to teaching and research activities as best and responsibly as possible; and

*Be It Further Resolved* that the College’s leadership urges the SUNY Chancellor to advocate on behalf of SUNY Old Westbury to the SUNY Board of Trustees, and to the New York State legislature and the Governor’s Office, for critically needed capital funds for a new science building with an adequate addition to use as surge space during the renovation, to accommodate the current overgrowth of students, faculty, and staff in the Natural Science Building, and in anticipation of future growth projections; and

*Be It Further Resolved* that the College strongly urges a single-phase renovation for the Natural Science Building after acquiring the addition so that the construction will be the least disruptive to student learning and faculty research, student enrollment, and that the building materials can be standardized throughout the entire process; and

*Be It Further Resolved* that sufficient capital funds be provided by the completion of the building renovation and addition to purchase all necessary modern equipment (i.e. microscopes, incubators, centrifuges, digital scales, etc.) and nonperishable supplies (i.e. micropipettes, forceps, tweezers, electric pipettors, etc.) to provide equal access and support equitable student training in the sciences; and

*Be It Further Resolved* that renovation surge does not use temporary spaces, which greatly disrupt teaching and research activities, in lieu of permanent improvements, such as an addition; and

*Be It Further Resolved* that the Faculty Senate urges that the planned STEM Building Renovation project and potential addition be considered a top priority in the current capital budget and in the upcoming SUNY 2022/2023 Capital Budget Request to be submitted to the SUNY Board of Trustees.

**SPONSORED BY**

* The Faculty from the Biological Sciences Department
* The Faculty from the Chemistry and Physics Department:
* The Faculty from the Psychology Department
* The Faculty from the Public Health Department

Adopted by SUNY Old Westbury Faculty Senate 12/10/2021.

Approved without dissent by Senate vote 26-0-0 (for-against-abstain).