

Date: 4/1/2026

Division: STEM

Division Dean: Jessica Hurless

Please respond to the following prompts about AY25-26 by clicking on the grey box:

I. List the programs that fall within your Division.

STEM Instructional Departments & Programs:

Allied Health (AS)

Astronomy

Biology (AS-T)

Biotechnology (AS)

Biotechnology Manufacturing Technician (AS, CoA)

Biotechnology Manufacturing Assistant (CoA)

Chemistry (AS, AS-T – Pending)

Computer Science (AS-T, CoS)

Data Science (AS – Pending, CoA)

Electronics (CoA, CoS)

Emergency Medical Care (CoS)

Engineering (Electrical; 4 AS Pending – Civil, Computer, Mechanical, Engineering)

Environmental Science 2.0 (AS-T – pending)

Geology (AS-T)

Health Science (AS-T)

Mathematics (AS-T, AS)

Natural Science (AS)

Network Engineering (AS, CoA, CoS)

Oceanography

Physics (AS-T)

Respiratory Care (AS, BS)

Sterile Processing (CoS)

Surgical Technology (AS)

Non-Instructional Programs

MESA Center

STEM Center

Fabrication Lab

Simulation Lab

Active Grants

NSF S-STEM – submitted a renewal proposal in February 2026

MESA

CSUEB Subgrant

AB 1705

II. Briefly describe any major changes to the Division or Programs' purview and functions during the past year.

The last year has seen some significant changes to the STEM Division and their programs.

- Changes to personnel:
 - The STEM Division was able to hire a FT Instructional Aide II and FT Retention Specialist to support the STEM Center.
 - The STEM Division was able to hire a FT Program Service Coordinator and FT Director to support the Allied Health Programs.
 - The STEM Division was able to hire a FT STEM Grants Project Director and FT Program Service Coordinator to support the STEM Division.
 - The STEM Division onboarded a new FT Biology faculty member, a new FT Chemistry faculty member, and a new FT Respiratory Care faculty member.
 - While we were able to hire some key positions that had been empty, we also had some individuals leave:
 - Transfer of a FT Chemistry faculty member
 - FT Surgical Technology faculty member
 - One mid-year FT Mathematics faculty retirement December 2025
 - Two FT Biology faculty retirements in May 2026
- Currently, the STEM Division has a few vacant faculty positions, which is impacting the workload and ability to accomplish tasks in a timely manner.
 - Faculty
 - Chemistry
 - Physics
 - Surgical Technology
- The Division has been impacted by statewide legislation.
 - AB 1111 – The Common Course numbering legislation has brought about course outline changes in Astronomy, Biology, Math, and Physics, with Chemistry and additional STEM courses on the horizon.
 - AB 1705 – The Equitable Placement, Support, and Completion legislation was a follow-up to AB 705. It requires Skyline College to place any new, incoming, US High School student with a program of study in STEM (with a calculus requirement) in a Calculus class. It doesn't matter what math students completed in high school, as it grants them access to Calculus. In Spring 2026, the District was able to assess (using the designed MMM codes) students using the AB1705 Math placement rules. We are now tracking the registration trends of students in order to best schedule math courses based on student patterns.
 - Course Program of Study (CPoS) will have an impact on STEM related programs, as some have hidden prerequisites.
 - Articulation concerns have required STEM Core labs in Anatomy, Physics, and Physiology to transition their online labs to F2F labs, which has resulted in a decrease in the number of sections able to be offered.

- The 50% of coursework online regulations in regards to federal financial aid awards, may have a significant impact on STEM majors and programs such as IMMERSE.
- The Allied Health Programs have been impacted by Accreditation changes.
 - The Sterile Processing Program had shifted in 2025-2026 to a 2-semester sequence from a 3-semester sequence as a result of clinical and laboratory hour requirements. It maintained its Spring start, but students are reporting that it is hard to complete the 400 required clinical hours in the 8-week summer term. Thus, the program is considering moving to a Fall and Spring rotation. This will impact the FTEF in Fall 2026.
 - The CoARC (Accreditation Body for Respiratory Care) updated (January 1, 2026) their faculty-to-student ratios in lab courses to 12-to-1. We previously were able to have 25 students to 1 faculty. This will significantly impact the FTEF needed in Fall 2026 and Spring 2027.
 - The Skyline College EMC program continues to hold probationary status by San Mateo County Health (3 years starting September 1, 2024).
 - The EMC program did have an audit visit on July 31, 2025, and demonstrated compliance on all the San Mateo County Health criteria.
 - The Respiratory Care Baccalaureate Program received continuing accreditation status.
- A number of STEM Grants concluded (see list below), which resulted in less reassignment time for the PI's and supporting salaries/services to be transitioned back to Fund 1.
 - DOE Title V DHSI Grant – ended May 31, 2025
 - NSF ATE SkyBay Tech Grant – ended August 31, 2025
 - Department of Energy nEXO Grant – ended August 31, 2025
 - SFSU NSF IUSE Subgrant – ending 9/30/25

III. Review the Improvement Platform's "General Information Summary" dashboard for program review completion and **note which programs within your division are (a) missing a CPR/PRU for their designated year, and are (b) scheduled for a CPR and/or PRU next year.** (CPRs are due on a 7-year cycle, 2 PRU's are **required** between each CPR.)

The only program missing a PRU was the Electronics Technology program. All other programs have submitted the necessary documentation.

In the 2026-2027 Academic Year the following program will be going through CPR:

- Biology

In the 2026-2027 Academic Year the following programs will have a PRU:

- Astronomy/Physics
- Chemistry
- Earth/Environmental Science

- Network Engineering
- Surgical Technology

IV. Review the Improvement Platform's "Course SLO/ PSLO Assessment" dashboard for your division and **note progress on course SLO assessment (for instructional/ student service programs with courses) or program SLO assessment (for student services programs) for the current three-year cycle? Which programs may need your support, and how will you support them?**

At this point, the Nuventive dashboard shows that the STEM Division has 12.1% of SLOs assessed for the first semester of a new three-year cycle (with Biology, Biotechnology, Chemistry, CIS, Mathematics, NETX, and Respiratory Care all having entered some portion of SLO assessment data. In sending reminder emails out to faculty about the SLO submissions for Fall 2025, faculty seem to be progressing. Physics, with the resignation of their SLO coordinator, is delayed in reporting, but has completed the assessments. Electronics and Engineering are in process as the course was taught by adjunct faculty, and Surgical Technology will have bandwidth once the accreditation report and annual report have been submitted. Lastly, we have had to make some changes to their 3-year maps (due to courses not being offered in the semesters designated).

V. Briefly describe the major challenges and achievements for your Division over the past year.

Divisional Challenges:

- For articulation reasons, the STEM core labs (Anatomy, Physiology, and Physics) have been required to transition their online labs back F2F. This has reduced the number of sections we are able to offer in these courses and created a scheduling challenge. Anatomy and Physiology share one 30-person lab space and Astronomy and Physics only has one 28-person lab space (whereas Biology and Chemistry have 3 labs spaces each). Physics sequences are in a majority of STEM degrees, so it creates a bottleneck for students.
- Within Allied Health, the number of clinical sites for the programs such as EMC, Respiratory Care, Sterile Processing, and Surgical Technology continue to remain a pressure point for the programs as new programs in the Bay Area are created. Establishing and maintaining relationships, developing contracts, and placing/observing students within the clinical sites (per accreditation standards) is extremely time consuming. This has resulted in a larger need for clinical preceptors (our professional expert position) to help orient and guide our students while at clinical sites in all of the programs. This increases the overall costs to each of the programs. Additionally, the cost of instructional supplies to prepare students for clinical rotations continues to increase (and are projected to keep increasing with supply chain and tariff issues). This has led to a shuffling of funds from one program to another, but with a need to review the instructional supply budget for each program.
- AB 1705 Implementation has been another challenge. Since compliance requires a District-wide implementation, the collaboration with the other campuses and the counseling division has been a time-consuming process. Additionally, it is hard to know how to schedule for the needs of students when it is a new placement process. Lastly, the implementation will necessitate additional tracking and data collection, which will require a strong collaboration with PRIE.



- Many students and faculty are requesting face-to-face lecture sessions versus the online or hybrid format (where lectures are online, and labs are in person). With the higher unit values on courses (4-6 units) it poses a scheduling challenge and moves some STEM courses off the normal 50-minute or 75-minute pattern. As a result, students may find building a schedule more difficult.
- The size of the STEM division (with 19 different instructional program, 25 degrees and certificates – with 8 more pending COCI approval, 4 Allied Health programs with different external accrediting bodies, a STEM Center, a MESA Center, a Fabrication Lab, large grants such as MESA and IMMERSE, etc.) it remains a challenge to accomplish everything. For example, each semester the Division has approximately 20+ tenure, tenured, and adjunct evaluations happening, which requires the dean to serve and complete the deans assessment (as well as oversee and facilitate the gathering of documents, etc.). With almost 100 faculty members, the review of syllabi, door cards, faculty requests, etc. is cumbersome. Keeping up-to-date on curriculum modifications, SLO assessment, program review, FTEFAC and hiring, RSI review of online courses, and other institutional processes is overwhelming, so many things take more time or are put off, which can lead to larger issues.

Divisional Achievements:

- The Mathematics and STEM Center successfully completed their CPR processes.
- The IMMERSE program submitted a grant proposal for a second endowment of S-STEM grant funds. If awarded, this would result in \$1.8 million dollars coming to Skyline College with \$1.2 million going to direct student aide.
- The STEM Center, based on student feedback, has incorporated a “quieter study space.” This has resulted in an increase in visitors and tutoring sessions.
- Science in Action has continued to run weekly throughout last semester and this semester with options of in person or via zoom, allowing a broader participation of both speakers and student/faculty/staff participation. Science in Action is an opportunity for our students to learn about and ask question of recent STEM graduates as well as more senior scientists. We specifically recruit speakers from underrepresented groups in STEM and community college backgrounds so that students are able to see a variety of paths to STEM careers.
- PTK under the leadership of Chemistry faculty Susanne Schubert has been named the top chapter in the California/Nevada region, and the 7th Most Distinguished Chapter in the Nation. At the International Catalyst Conference, the Skyline College team placed in Distinguished College Project, Distinguished Honors in Action (HiA) Project, a top-three national Distinguished HiA Theme Award, and the Beta Alpha Continued Excellence Award. One Skyline College PTK Officer, Knox Lwin, advanced to the final round of the International Officer elections.
- Established an MOU with Stanford’s Community College Outreach Program, which is a summer internship program for students that haven’t had an internship experience. Stanford reported that the largest number of applicants this year has come from Skyline College students.
- Expanding Your Horizons Conference for girls in 6th through 12th grade returned this year. We had 310+ students attend workshops facilitated by Skyline College faculty, students, lab coordinators, and community members.
- STEM Students were well represented in the Jack Kent Cooke Scholarship Semi-finalists! Specifically, Andrea Anderson (IMMERSE Scholar) and Qian Zhao (Computer Science student) are 2 of 3 Skyline College students selected to compete for a finalist spot.

- The Summer Introduction to Research and Exploration in Nuclear Physics (SIREN) held its first annual program in Summer 2025. The program provided a 3-week paid research internship to 30+ MESA, IMMERSE, and STEM students. They completed experiments that advanced the nEXO Cosmic Watch work. As a result of its success, SIREN'S work was published in Physics journals and the [International Cosmic Day Booklet](#).
- The Division developed a PT Pathway in Allied Health for Promise Scholars students
- The Division received a BioMADE Grant, which allows the Biotechnology (BTEC) program to collaborate with Biocom California Institute's efforts to enhance workforce development initiatives in biomanufacturing and life sciences across the San Francisco Bay Area region.
- The Network Engineering (NETX) program has developed internships and full-time employment opportunities at Equinix, a company that builds and operates data centers supporting AI technologies, including platforms such as Anthropic.
- The Respiratory Care Baccalaureate Degree program officially received Continuing Accreditation Status from CoARC. With new leadership, we have been able to increase enrollment in the baccalaureate program to over 20+ student in the fall.
- The MESA, IMMERSE, and SIREN programs continue to have students' research projects accepted to conferences likes SACNAS and ERN.
- The Respiratory Care and Surgical Technology programs have established new clinical partnerships with Kasier Permanente.

VI. List and describe the major goals for your Division – What will the Division focus on achieving over the next 1-3 years? How do your Division goals align with the College's [M-V-V](#) and [Education Master Plan](#)?

1. Increase the available lab space for Anatomy & Physiology and Physics programs (Strategic Goal 2E and 3D).
2. Increase the available space for the Network Engineering Program (Strategic Goal 3D)
3. Institutionalize support for the Expanding Your Horizon's annual conference. Specifically, trying to identify a consistent, and single funding source that would allow us to cover food for participants (Strategic Goal 2A and 6C).
4. Institutionalize support for the Allied Health preceptor positions. Specifically, trying to identify a consistent, and single funding source that would allow the STEM budget to cover these expenses (Strategic Goal 6A)
5. Continue updating lab equipment, classroom furniture, and technology to continue to offer high-quality, state of the art classroom experiences with modern lab equipment and curriculum for all students. (Strategic Goal 3D).
6. Work with each program to create a 2-year schedule of courses for each program that can be shared with students and counseling faculty while creating SEPs. This schedule should keep in mind other programs, modalities, and student needs (Strategic Goals 2C, 2E, 5D).
7. Continue working with MCPR to design and institute a new marketing and public relations campaign for the Allied Health programs (EMT, Respiratory Care, Sterile Processing, and Surgical Technology) to raise visibility and increase student enrollment (Strategic Goal 2D).
8. Continue the systematic review of Math program data in hopes to develop better strategies to address the decreased number of students attempting Math in their first year, the transfer level Math completion rates, and AB 1705 placement and scheduling (Strategic Goals 2C & 5D).
9. Continuing OER/ZTC divisional efforts (focusing on BIOL, CHEM, and MATH), so that OER Degree Pathways can be realized across campus (Strategic Goals 3C & 5D)

10. Complete an RSI review on online STEM course offerings to ensure compliance (Strategic Goal 1D and 1E).
11. Strengthen the community partnerships and pathways with CTE programs like EMT, ELEC, and NETX to increase adult enrollment. For example, building out the EMT refresher courses in the summer for practicing EMTs and Paramedics, and strengthening the Adult High School pathways (Strategic Goal 2A & 2E).
12. Continue to increase the number of internships opportunities for STEM students (Strategic Goal 4B)
13. **Using the boxes below, list the resource requests for FY26-27 that the Division is moving forward for consideration. Please note that the resource requests should be in declining order of priority, as indicated in the upper left corner of each box. For each resource request, describe how it connects with your Division goals, and the potential consequences of not securing the requested resource. In sum, please explain why filling this request should be a priority for the College. (To see a list of requests submitted by your programs, please follow the separate instructions for downloading from the Nuventive Platform.)**

Order of Priority	Resource Request Title	Type	Program(s) Impacted	Amount \$
1	New Lab/Storage Spaces	Rennovation/ Designated Space	Astronomy/Physics; Anatomy & Physiology	\$300,000
Describe how this request impacts program/division operations, and how it will further completion of the Division goals stated above.				
The Astronomy/Physics Department currently operates out of one lab (Building 7, Room 305). This lab space has 28 seats, so limits the number of students that we can accept into each section. Additionally, the storage space is also limited, so much of the equipment is stored in the classroom space (on the countertops). In order to schedule the current Astronomy & Physics lecture and lab course offerings, we have had to expand into Building 12-134, which takes a general STEM lecture classroom space away for scheduling purposes (and makes getting labs prepped and necessary equipment much more complicated). With the move to permanently bring back Physics labs face-to-face, we have experienced even more scheduling challenges, and had to reduce sections. PHYS 210/220 and/or PHYS 250/260 are tied to a number of Degrees/Certificates: 1. Allied Health Science AS Degree Program 2. Biology for Transfer AS-T Associate in Science Degree for Transfer 3. Chemistry AS Degree Program (Pending) 4. Civil Engineering AS Degree Program 5. Computer Engineering AS Degree Program 6. Computer Science for Transfer AS-T Associate in Science Degree for Transfer 7. Electrical Engineering AS Degree Program				



8. Engineering AS Degree Program
9. Interdisciplinary Studies: Letters and Science AA Degree Program
10. Interdisciplinary Studies: Social and Natural Sciences AA Degree Program
11. Kinesiology for Transfer AA-T Associate in Arts Degree for Transfer
12. Natural Science AS Degree Program
13. Public Health for Transfer AS-T Associate in Science Degree for Transfer
14. Mathematics AA Degree Program
15. Mathematics for Transfer AS-T Associate in Science Degree for Transfer
16. Mechanical Engineering AS Degree Program
17. Physics for Transfer AS-T Associate in Science Degree for Transfer

Thus, we are in need of a bigger lab space (or two lab spaces) for Astronomy & Physics.

The Anatomy & Physiology programs share a single 30-person lab. These two courses are prerequisites for Dental, Nursing, Radiology Tech, Respiratory Care, and Surgical Technology programs. They are some of the most in demand courses, with large waitlists each semester. When we were offering multiple sections fully online, we were able to suffice with the one lab. However, due to articulation reasons these labs have to be transitioned back F2F. With Physiology having a 2.0 unit lab, it requires 6 hours of lab time a week (per section). This has reduced the number of lab sections we can offer to students. Thus, we are in need of two lab spaces for Anatomy & Physiology.

The Network Engineering Program has established multiple corporate collaborations (ie. Equinix). As such, they are donating equipment that students can repair during their course work. This equipment and work is currently being done out of a faculty member's office, so we need a designated repair area space in Building 19 (where the program's classrooms are set-up).

- These requests directly tie to Goals #1, 2, 5, and 11

Order of Priority	Resource Request Title	Type	Program(s) Impacted	Amount \$
2	Expanding Your Horizon Funding	Supplies and Materials		\$10,000
Describe how this request impacts program/division operations, and how it will further completion of the Division goals stated above.				
The Educational Master Plan goals aim to serve the community, create partnerships, and promote equity and access in what we do. Expanding Your Horizons is an annual, day-long conference for young women ages 6 th – 12 th grade to engage in STEM and Allied Health lab/workshops to increase their enthusiasm about STEM fields. Ultimately, hoping to create a matriculation from local high schools to Skyline College.				



For the last couple of decades, this program has been a success and was funded through participant registration fees collected. However, with the Free College initiative the participant fees were removed. Thus, we are finding it challenging to secure consistent institutional funds that would allow us to purchase food, drinks, and swag for each of the participants.

As we seek to increase enrollment, these partnerships with feeder middle and high schools become critical.

- This request directly ties to Goal #3

Order of Priority	Resource Request Title	Type	Program(s) Impacted	Amount \$
3	Increased FTEF & budget line item	Faculty/ Adjunct FTE	EMC, Respiratory Care, Surgical Technology, Sterile Processing	1 FTEF, \$56,000 in AH preceptor costs, \$10,000 in instructional supplies (lottery funds)

Describe how this request impacts program/division operations, and how it will further completion of the Division goals stated above.

The Allied Health programs have seen a number of accreditation changes to required hours, faculty-to-student ratios, and curriculum. As a result, we have had to add additional lab sections, change the rotation of course offerings (changing the semesters certain courses are offered), and add Allied Health preceptors to meet ratios.

EX: Our Sterile Processing program has always been a 3-semester sequence, which started in Spring. However, with changes it has now become a 2-semester sequence. We continued to start it in Spring, but that places the clinicals into the summer session (8 weeks). We are finding this is not enough time for students to complete the 400+ hour requirement. Thus, we need to shift to a Fall entry, so that it will be Fall and Spring terms. This will move .84 FTEF into the Fall, which is not already accounted for in the STEM schedule.

This is just one example of the need to switch courses and FTEF.

Additionally, the clinical liaisons used to be categorized as adjunct faculty. However, these individuals were FT employees of various hospitals and clinical sites, which never “taught” courses or stepped foot on Skyline College’s campus. With the institutional move away from adjunct faculty being used in non-instructional capacities, we have had to transition them to the Professional Expert role of Allied Health Preceptor. These expenses now move from position control to the STEM budget. So, we need to have a specific line item in the budget to address this switch.



Lastly, all of these changes have led to increases in instructional supply costs (as we are operating two lab sections with each course versus one). We need an increase in the instructional supply allotment to Allied Health programs (specifically Surgical Technology and Sterile Processing) to address the costs.

- This directly ties to Goals #4 and 6

Order of Priority	Resource Request Title	Type	Program(s) Impacted	Amount \$
4	Marketing Materials	Supplies and Materials	EMT, NETX, RPTH, SURG, STEM Center	Unknown
Describe how this request impacts program/division operations, and how it will further completion of the Division goals stated above.				
The STEM Division offers many programs, workshops, and spaces for students. However, there is a lack of signage, marketing, and overall visibility of the programs. This has led to a decrease in enrollment in some of these CTE programs. We would like to work with MCPR to design new and updated campaigns to try and promote our programs and services. This will help us in terms of our goals to increase enrollment. • This directly ties to Goal #7				