

SAN DIEGO
MESA COLLEGE



Program Review

Summary and Reflections with Unit Goals, Action Plans, and Updates

Instructional Program - Biology (BIOL)

Executive Summary

Describe the successes and challenges your unit has faced since the last comprehensive review.

Successes:

- Fully returned all courses to face-to-face since Covid-19.
- We have been able to maintain relatively high fill rates for our courses even with decreased enrollment.
- Faculty in our program (Daniela Bruckman, Leslie Seiger, Paul Detwiler) have been successful in obtaining grants for students. Daniela received funding through an NSF grant to incorporate multi-day field experiences at the UCI research station in Anza Borrego into the Bio 210B course and to support students in research projects. Paul Detwiler received a San Diego Mesa Foundation Innovation Grant to support a 10-week summer internship program in marine science for Mesa students at SDSU's Coastal Marine Institute Laboratory. The CMIL is an urban marine research facility where students and scientists conduct studies that help them better understand and address the environmental problems affecting the Southern California coastline. In fall 2022, a proposal to expand the program that Detwiler co-wrote with CMIL personnel received a 2023 Pathways to Inclusive Research Training award from California SeaGrant, resulting in funding to provide stipends for participants in summer 2023. Leslie is involved in the Invention and Inclusive Innovation (i3) Initiative Pilot Project, an interdisciplinary Workforce and Economic Development grant. The i3 is designed to develop 21st century workforce skills while solving community problems, provide experiential learning for students, teach students about using the entrepreneurial mindset as a skill, and learn as a cohort in an interdisciplinary environment while building confidence. A secondary goal is to gain experience to work related to STEM for students who have been traditionally underrepresented in these fields.
- We had an unsuccessful search for a full-time faculty member in anatomy and physiology last spring (Sp22) but thankfully were successful in the search this past semester (F22) and have hired Thu (Tiffany) Nguyen as a new faculty member to teach these courses.
- Multiple biology faculty are involved in mentoring students through field-based research projects that culminated in posters at the MCRC, with one faculty's (Dean Leavitt) students winning Best Experimental Poster.
- Faculty and ILTs are heavily involved in the Enrollment Management committee at various levels (subcommittees) to thoughtfully and effectively increase enrollment on our campus and pave the way for best practices at Mesa and our sister campuses.
- Anar Brahmabhatt and Jennifer Carmichael have been a part of the HSI STEM Curriculum Workgroup (part of Mesa's Title III HSI-STEM E3: Equity, Excellence and E?xito). This is where we meet with our colleagues across the STEM courses (Physics Chemistry and Math) as well as STEM and Transfer counselors, and Institutional Research analyst to work collaboratively on how STEM curriculum for biology majors and allied health track support each other, where they do not, and how to create the best suggested pathways for student success.
- Todd White is a part of Platinum 5 project focused on the "Golden 4" areas of general education: critical thinking, written communication, mathematics/reasoning (STEM), and oral communication, and more recently the fifth addition: ethnic studies. One major goal of this project is to create informal cohorts of students using STEM majors as an inaugural group.

Challenges:

- Autoclaves that were purchased for our Microbiology classes unfortunately have not come without issues. One unit was shipped with a faulty control panel. This renders this machine inoperable. We are working with our Dean and the service contractor to deal with this. Thankfully, we were able to secure an ongoing service contract to maintain the autoclaves, as it was already necessary to utilize this service. Currently, we have no alternative means for creating media. Therefore, we are asking on our BARC request for a Biosafety cabinet (BSC) and an ergonomic repeater pipettor. This is a standard piece of equipment for microbiology labs, one that we have needed but have done without, relying on outdated methods instead.
- The refrigeration systems for the microbiology labs are also currently not working. Without these, it is impossible

Summary and Reflection

to create/store the media necessary for lab exercises. We were recently informed that in order to get these refrigerators replaced, we will have to apply for BARC funding (BARC request completed). If we do not get the funding for this equipment, we will not be able to run microbiology labs, as these are vital to the course.

- We have challenges finding qualified adjunct faculty to teach our anatomy and physiology classes and even with the new full-time hire, we could not run all of the classes we were hoping to.
- We have broken and outdated equipment for lab classes (microscopes, spectrophotometers) that need to be replaced and microscopes will also require an ongoing service contract for maintenance.
- One of our contract faculty (Jennifer Carmichael) was hired to fill the vacant Dean of Math & Sciences position, so we now will need to hire to replace her.
- Faculty would like to attend more professional learning conferences off-campus/out of state but current conference and travel fund monies available to support these endeavors are not sufficient to cover all costs, thereby creating financial hardship to faculty in order to attend these events.

If applicable, describe any major curricular or service changes your unit has engaged in and the impact of those changes since the last comprehensive review.

- Our department continues to stay current with curriculum and update the Course Outline of Record for our courses. Since our last comprehensive review, we have collaborated with City College and Miramar College to update the following courses: Bio 210A, Bio 210B and Bio 230. Changes to the curriculum primarily center around creating more equitable and diverse courses in terms of access to textbooks (with the inclusion of OER choices for textbooks) and inclusion of individuals from diverse backgrounds who have contributed to the fields represented by these courses. We hope that the overall impact is a positive one with these additions.
- Several faculty members have engaged in FIGS (faculty inquiry groups) to help enhance curriculum. Caitlin Tiffany embarked on a FIG directed at Grading for Equity. Anar Brahmhatt & Jennifer Carmichael have completed a FIG for Bio 210A centered around a more coherent content delivery that also took into account inconsistencies in student pre-requisite knowledge and how to bridge those gaps. Daniela Bruckman, Paige Hu and Dean Leavitt used their FIG to create a Research 101 Canvas Shell so students could learn the basics of research, find research opportunities, and connect with student researchers at Mesa. As a consequence, our students are engaging more in research through the Eco Research Program, Honors Contracts with our faculty, and the Mesa Research Conference with greater opportunities to shine and be competitive for transfer and beyond in career development.
- Anar Brahmhatt joined the 2021-2022 Equity Minded Assignments cohort to learn about and create an assignment for Bio 205 that would engage students in ways that allowed them to explore microbiology and diseases through an equity lens: learning about specific diseases of interest to each student and highlighting racial disparities that exist showcasing their knowledge in unique creative ways.
- Anar Brahmhatt and Jennifer Carmichael have been a part of the HSI STEM Curriculum Workgroup (part of Mesa's Title III HSI-STEM E3: Equity, Excellence and E?xito) where we meet with our colleagues across the STEM courses (Physics Chemistry and Math) as well as STEM and Transfer counselors, and Institutional Research analyst to work collaboratively on how STEM curriculum for biology majors and allied health track support each other, where they do not, and how to create the best suggested pathways for student success.
- Many of our lab courses have also been updated to provide more inclusive and equitable practices. Of note is the procurement of mobile charging carts to service individual chromebooks or laptops for each student in the class in the Bio 210A and Bio 205 lab courses. Bio 107 has also obtained a set of new laptops for each student. These courses have (or have plans to) modify their lab curriculum to allow for smaller groups (individual or groups of two) to work on lab exercises and complete computer work in the classroom. With these curricular changes, students have the benefit of a working device and their peers as well as instructor help to complete lab tasks within the class period. This will allow for individual interaction for each student and thus greater engagement and understanding with the intent of greater retention and student success.

If applicable, describe the impact of any new resources (human, fiscal, etc) on the unit and/or action plan implementation.

- We were able to purchase and begin using two new autoclaves for Bio 205 labs. In theory, this will allow us to prepare microbiological media and handle waste in an efficient manner with the eventual increase in sections offered. Unfortunately, one of the new machines is not working (see above for more information).
- We were provided with some monies from HEERF and the HSI grant which allowed us to update our

Summary and Reflection

biotechnology labs in bio 210A

- We received funding for new laptops and transilluminators in our bio 107 labs, enabling us to increase student equity in relation to graphing data and technology skills (one of our CLOs)
- We received funding for mobile charging carts to service individual chromebooks or laptops for each student in the class in the Bio 210A and Bio 205 lab courses. This will enable students to work individually on projects allowing them to complete necessary work during class time with peer and instructor support.
- We also received laptops for our Bio 200 (Biological Statistics) course, but unfortunately was not able to procure a mobile charging cart for these 24 computers.
- We hired Michael Williams as a new contact faculty member to teach microbiology, general biology, and majors biology, as well as Thu Nguyen for anatomy & physiology.
- We hired two ILTs (Devin Di Pierro and Thieny Trinh) to provide needed support for our laboratory courses.
- We received approval for funding for new laptops/chromebooks for our microbiology and 210 classes, which will improve student equity as now each student can work on their own computer during the labs.
- We were able to secure HEERF funding to order 4 new anatomy models (2 per lab room)

If you assess OUTCOMES, please confirm that the outcomes have been reviewed for accuracy. If you do not assess Outcomes, skip this question.

Reviewed & Accurate

Related Documents for Charts and Graphs

Executive Summary Complete

Yes

Data Reflection

Trends observed in program/service area's data.

Looking at data Fall 21/Spring 22:

Percentage point gap: Overall success rate all bio courses: 68.2% (F2F classes) – compared to School (Math/Natural Sciences) (67.9%) & Campus (71.5%)

Equity gaps: 19.3% Black/African American/ 14.2% Latinx in bio classes overall, versus 13.3% B/AA & 12.3% Latinx for the School, and 9.9% B/AA & 7.6% Latinx for Campus

Overall Bio Retention rates: 78.2 B/AA & 80.9 Latinx

Overall Bio Success rates: 50% B/AA & 59.8 Latinx

Success rate in Allied Health Track courses (Bio 205/230/235) – 67.2% overall (79.1/56.5/74.2%)

Equity gaps in Allied Health Track courses: 24.2% Black/African American/ 13.4% Latinx

Retention rates in Allied Health Track courses: 74.1 B/AA & 74.4 Latinx

Success rates in Allied Health Track courses: 44.4% B/AA & 59.1 Latinx

Success rate in Majors Biology track courses (Bio 210A/210B) – 72.9% overall (65.7/84.4%)

Equity gaps for ethnicity in Majors Biology track courses: 32.6% Black/African American & 18.1% Latinx for combined data When looking at individual course data for the last 2 semesters provided (F21/Sp22) there were not enough Black/African American students who took each course to provide data, but Latinx data for each class was 25.2% for 210A and 15.1% for 210B.

We chose to evaluate data for these tracks because they represent the largest numbers of students in our program, as well as the greatest number of degrees awarded in our program. Unfortunately, these numbers are similar to what we have seen in the past, even with faculty consciously, collaboratively and intentionally making changes in their courses to improve equity outcomes.

Biology degrees awarded 2021/2022 – 149 (6.7% Black/African American; 35.6% Latinx; 15.4% Asian/Pacific Islander; 26.2 White)

Summary and Reflection

Describe any equity gaps in the data. Are there differences and/or patterns observed by demographics (e.g. race/ethnicity, gender, age, etc.)

We chose to look at aggregate data for our allied health and bio major students, as these students represent the largest numbers within our program. These educational tracks do include two of the most challenging courses that we offer (bio 210A and bio 230), and faculty in these courses are continuing to implement multiple strategies to improve student success. One interesting observation in regards to our allied health students, when we looked at each course individually, Bio 205 had no disproportionate impact equity gap for Latinx with 38.2% for B/AA while Bio 235 had no disproportionate impact equity gap for B/AA with 14.1 gap for Latinx. Bio 230 had disproportionate gaps for both groups (23.3% B/AA and 17.1% Latinx). This becomes challenging to analyze as these courses serve the same populations of allied health majors. Human Anatomy (Bio 230) is the most challenging course taught in the biology department. It has historically had one of the lowest success rates (for all groups). Instructors have been working together to figure out ways to improve student success (for all populations) as well as reduce equity gaps but there is only so much that can be done in a course this rigorous. One plan that we have is to create a prerequisite course that better prepares students for the rigor of this course. We do see improved success rates as students move through the usual course sequence of taking 230, then 235 and finally 205, but for various reasons, this is not always how students choose to take (and are sometimes counseled to take) these classes. Additionally, we will be meeting with our colleagues in math and science to review curriculum in terms of skills and knowledge needed from one course or discipline to another. This will be beneficial for potentially increasing student success and improving equity gaps in the Bio 210A course (first course for majors) which is also an extremely rigorous course. Even though we are still seeing significant equity gaps in our Black and Latinx students, we are pleased to note that they do represent a large proportion of students who are receiving allied health and biology degrees. In fact, Latinx students represent the largest degree receiving group overall (35.6%).

Describe the discussion(s) that took place about the unit's learning outcomes assessment data.

All course and program outcomes were successfully evaluated over the previous evaluation cycle. For the new cycle, the DOCs led a discussion to review all CLOs and PLOs and made changes as necessary. To facilitate the ability to more easily assess CLOs for this upcoming shortened cycle, especially with the majority of our classes having multiple sections and often taught by adjuncts as well as contract faculty, DOCs created a shared file containing the specific assessment tools that will be used in each course. We will create a timeline indicating when each course will be assessed, and then the DOCs will distribute the evaluation tools to each faculty member teaching the class. Data will be collected by the DOCs and lead faculty, with the lead faculty evaluating and reporting on the data. Our various endeavors in further developing curriculum (see "Curricular changes" section) have aided in enhancing our discussion about course outcomes data analysis and future best practices.

Related Documents for Charts and Graphs

Data Reflection Complete

Yes

Practice Reflection

Describe current practices your program/service area has engaged in that you believe impact the above data trends and equity gaps.

- Faculty have been working on FIGs within the department and across schools to support students and improve equity outcomes. Examples include: Daniela Bruckman, Paige Hu, Dean Leavitt (Biology), Erin Evans (Sociology) and Waverly Ray (Geology) to create a research resource titled, "Teaching Research for Equity and Excellence". This resource will take the form of a Canvas website where students will be able to access research opportunities, find community, build research skills view models of successful research endeavors.
- Caitlin Tiffany's FIG on Grading for equity as well as the Bio 210A FIG conducted by Anar Brahmbhatt and Jennifer Carmichael centered around a more coherent content delivery that also took into account inconsistencies in student pre-requisite knowledge and how to bridge those gaps have also helped to decrease equity gaps.

Summary and Reflection

- Multiple faculty have participated in the CEER (Curriculum Equity and Excellence Review) summer institute to examine the cultural contexts that they bring to the classroom, re-imagine classroom activities and assignments, and develop strategies to be more responsive to students in order to increase equitable practices.
- Faculty have participated in Path to STEM Success as well as the HSI E3 STEM Curriculum Workgroup workshops and events. We will also be collaborating with colleagues across our School's disciplines in a STEM curriculum summit to discuss curriculum especially in terms of skills and knowledge needed from one course or discipline to another. This will include the challenges from pandemic teaching and learning, legislative changes, and barriers to transfer with an equity focus.
- Faculty have attended out of state conferences at large personal expense (Anne Geller, Kevin Krown – HAPS) that included update speakers and workshops on improving DEI specifically in anatomy and physiology classes.
- Faculty are involved in mentoring students through field-based research projects (Eco Research Scholar Program in 2020/2021 and currently independently) that culminate in posters at the MCRC.

What other factors (internal or external) might also impact the above data trends and equity gaps?

- In general, faculty have found that many of our students had challenges returning to in person instruction after remote instruction due to Covid-19, especially in relation to motivation, study skills, and time management. Absences due to COVID-19 have compounded students' abilities to stay on top of content and remain engaged in their courses.
- There is a lack of support services available for evening students (DSPS, STEM center, food) which negatively impacts these students.
- While we have seen increased success rates and improved equity outcomes when students utilize tutoring services (STEM center, embedded tutors and peer mentors) we have difficulty recruiting and keeping quality tutors. When such tutors have been available, we have seen that students are better supported and as a consequence more successful (to date we have had tutors and mentors for Bio 107, Bio 235 and 230, Bio 210A/B).

Related Documents for Charts and Graphs

Practice Reflection Complete

Yes

Mid-Cycle Updates

Are there any edits or updates to the Executive Summary above?

We had some adjunct faculty who were long time instructors in physiology and general biology retire, so we had to hire some new adjuncts to replace them. We were able to find someone for the 107 class and Bill Brother's was able to teach a physiology class as his pro-rata assignment, but we'll need to find some new qualified adjuncts for anatomy &/or physiology for next semester if we want to maintain the same number of classes. We also had to replace a microbiology adjunct due to a significant illness at the beginning of the semester, and thankfully were able to quickly hire someone who is also teaching at Southwestern. We are finding it increasingly difficult to staff our microbiology courses with qualified faculty and this is now the limiting factor in our desire to increase sections.

We are in process of hiring to replace a full time faculty member due to Jennifer Carmichael's transition to dean of math and science and hopefully will find someone to begin in the Spring 24. **Update - David Lizarraga was hired as a new contract faculty member. Tiffy (Thu) Nguyen is beginning her first evaluation cycle. Michael Brewer and Todd White are in their 8th year and undergoing evaluation for promotion to full Professor. Caitlin Tiffany is in her 4th year and undergoing evaluation for tenure and promotion to associate professor. ** Update - Brewer, White & Tiffany all successfully attained promotion.

Three faculty (Geller, Brewer, Tiffany) attended the Human Anatomy and Physiology Society annual conference in May 2023. Kevin Krown attended the American Physiology Society Summit. Other instructors indicated that they would have liked to attend conferences but due to cost and other constraints, were unable to.

We had two ILTs requiring extended leave this semester, and we were able to hire a temporary replacement ILT for the semester for coverage.

We received some new reproductive and urinary models for the biology 160 lab with student retention funds in

Summary and Reflection

order to revise instruction and improve diversity, equity and inclusion when discussing sex and gender in the anatomy and physiology course.

CORs for bio 160 and 110 were updated and in process of curriculum approval.

We are working on remodeling one of our classrooms for more integrated and innovative instruction with monies from the HIS STEM grant.

We received the repeater pipettor that we requested for our microbiology class, as well as the biosafety cabinet. However, this has not been installed yet due to short staffing in facilities, and therefore is having a negative impact on our program as we are unable to safely store materials for this course. We are also still waiting for the refrigerators that were approved for the microbiology prep area, and these have yet to even be ordered.

Are there any edits or updates to the Data Reflection above?

The additional two semesters available for analysis (F22/Sp23), do not indicate any significant differences from the previous analysis therefore there are no edits or updates to our previous data reflection.

Are there any edits or updates to the Practice Reflection above?

We are still dealing with COVID absences this semester with the most recent outbreak. This becomes especially challenging in the bio 230 (Human Anatomy) course since the lab room is utilized back to back with classes, and we currently don't have the facilities or additional models to be able to offer make-up anatomy lab practicals in a similar format to the original exam. The addition of the food truck is a welcomed positive support for our evening students (and faculty), but early closing hours in the STEM and DSPS centers still negatively impacts our evening students. We continue to encourage our students to both become, and utilize the tutoring and mentoring programs. There are no other significant edits or updates to the practice reflection.

Summary and Reflection

Goal 1: Hire new contract faculty

Unit Goal: Goal 1: Hire new contract faculty to replace loss of Jennifer Carmichael in our department.

Goal Status: Completed

Beginning Year: 2022 - 2023

Projected Completion Year: 2023 - 2024

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Pathways and Partnerships - Objective 1: X
- Scholarship - Objective 4: X
- Stewardship - Objective 6: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p> <p>Action Plan: 1. Fill out necessary request forms for faculty hiring 2. With approval, form hiring committee</p> <p>Action Plan Cycle: 2022 - 2023, 2023 - 2024</p>	<p>Submission Date: 11/13/2023</p> <p>Action Plan Update: Approval was granted for hiring and a committee was formed. The committee has completed the paper screening, and is preparing for interviews. We are hoping that there are qualified candidates to move forward to the president's interview at the end of this semester, and that a new hire will begin in the Spring 24 semester.</p> <p>Update Year: 2023 - 2024</p> <p>Action Plan Progress: Completed</p>

Goal 2: Develop a Human Biology course (lecture/lab)

Unit Goal: Goal 2: Develop a Human Biology course (lecture/lab) as a prerequisite for our allied health track students to increase student success in our 200 level classes (bio 230/235/205)

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Scholarship - Objective 3: X

Summary and Reflection

- Scholarship - Objective 4: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p> <p>Action Plan: Create a FIG to evaluate feasibility of new course, including working with articulation office, reviewing other similar courses, and discussing with district colleagues.</p> <p>Action Plan Cycle: 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	<p>Submission Date: 11/13/2023</p> <p>Action Plan Update: There were no FIGs available, but Anne Geller & Anar Brahmhatt met with the articulation officer (Juliette Parker) and with her help found multiple similar classes at other community colleges to prove feasibility. Additionally, we met with Allied Health Directors Connie Renda (HEIT; HIMS) and Amanda Johnston (PTA) to discuss the continued need for the biology 160 course as it would be challenging to create a Human Biology course and make it at least 51% different from that existing course. However, we are currently unsure of the fate of the 160 course as it does not meet the new Cal-GETC requirements that are supposed to be in place by 2025.</p> <p>Update Year: 2023 - 2024</p> <p>Action Plan Progress: On Track</p>
<p>Action Plan Status: Active</p> <p>Action Plan: Develop and launch course outline</p> <p>Action Plan Cycle: 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	<p>Submission Date: 11/13/2023</p> <p>Action Plan Update: We are in progress but not yet at the stage to launch.</p> <p>Update Year: 2023 - 2024</p> <p>Action Plan Progress: On Track</p>

Goal 3: Provide additional faculty support for research endeavors for our bio students

Unit Goal: Goal 3: Provide additional faculty support for research endeavors for our bio students. Many of them are pursuing careers in academia are greatly benefited from the opportunity to participate in real scientific studies. ESUs or release time would incentivize more faculty to get involved in serving as mentors and funds (relatively small) for materials would go a long way.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Pathways and Partnerships - Objective 1: X
- Scholarship - Objective 4: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p>	<p>Submission Date: 11/14/2023</p>

Summary and Reflection

Action Plans	Action Plan Update
<p>Action Plan: Enlist a core group of faculty dedicated to research endeavors</p> <p>Action Plan Cycle: 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	<p>Action Plan Update: Daniela Bruckman has taken the lead in Biology to address these needs. She has received some money to fund student field experiences and research through an NSF grant that was lead by Jennifer Snyder and cowritten with Don Barrie, Katlin Choi and Daniela.. These funds meet some of the needs to mentor student research however, it is limited to the Bio 210B class.</p> <p>Update Year: 2023 - 2024</p> <p>Action Plan Progress: On Track</p>
<p>Action Plan Status: Active</p> <p>Action Plan: Request/research areas of additional funding for support for faculty development and mentoring of student research projects</p> <p>Action Plan Cycle: 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	<p>Submission Date: 11/14/2023</p> <p>Action Plan Update: We have received some money to fund student field experiences and research through an NSF grant that was lead by Jennifer Snyder and cowritten with Don Barrie, Katlin Choi and Daniela Bruckman. These funds meet some of the needs to mentor student research however, it is limited to the Bio 210B class. Daniela Bruckman is also on the Mesa College Research Conference committee, and they are working to find more permanent sources of funding to incentivize and support student research at a larger scale.</p> <p>Update Year: 2023 - 2024</p> <p>Action Plan Progress: On Track</p>

Goal 4: Acquire new and replacement equipment in Microbiology (Bio 205) lab

Unit Goal: Goal 4: Acquire new and replacement equipment in Microbiology (Bio 205) lab to maintain excellence in curriculum, allow for innovation, and ensure quality instruction that is more in line with current clinical and research fields.

Goal Status: Active

Beginning Year: 2022 - 2023

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Completion - Objective 1: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Pathways and Partnerships - Objective 1: X
- Scholarship - Objective 4: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p> <p>Action Plan: Fill out necessary request forms for BARC</p>	<p>Submission Date: 11/13/2023</p>

Summary and Reflection

Action Plans	Action Plan Update
<p>Action Plan Cycle: 2022 - 2023, 2023 - 2024, 2024 - 2025, 2025 - 2026</p>	<p>Action Plan Update: BARC request filled out and was approved. We received and are currently using the pipettor repeaters. The biosafety cabinets and refrigerators were purchased and received by the stockroom/shipping & receiving but due to staffing issues with facilities they have yet to be installed, therefore are not usable to us.</p> <p>Update Year: 2023 - 2024</p> <p>Action Plan Progress: Barriers Encountered</p>

Goal 5 - Funding for Anatomy Models - Utilization for DSPS/Student Retention

Unit Goal: Currently, faculty have challenges when trying to support DSPS students who require additional time and/or a distraction-free area for exams, and other students who require lab practical make-up exams due to a variety of valid reasons. This is due to the unavailability of additional anatomical models that can be used to offer exams in a room other than the anatomy rooms, which are utilized from 8am-10pm M-Th. If we had an additional full set of anatomical bones/models that are currently used for instruction, faculty could set up lab practicals that could be proctored through DSPS or by faculty in an unoccupied classroom. This is not currently possible and therefore is an issue with student equity, success and retention.

Goal Status: Active

Beginning Year: 2023 - 2024

Projected Completion Year: 2025 - 2026

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 2: X
- Completion - Objective 2: X
- Completion - Objective 3: X
- Completion - Objective 4: X
- Pathways and Partnerships - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X
- Stewardship - Objective 3: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p> <p>Action Plan: Faculty will be requesting BARC funds for purchase of these additional anatomical models for testing purposes. Additionally, they will be looking for other potential funding sources.</p> <p>Action Plan Cycle: 2023 - 2024</p>	

Summary and Reflection

Goal 6: Acquire new and replacement equipment in the majors Biology lab (Bio 210A)

Unit Goal: Goal 6: Acquire new and replacement equipment in the majors Biology lab (Bio 210A) lab to maintain excellence in curriculum, allow for innovation, and ensure quality instruction that is more in line with current cellular, molecular, and biotechnology practices.

Goal Status: Active

Beginning Year: 2023 - 2024

Projected Completion Year: 2024 - 2025

Mapping

Mesa College Strategic Plan: Roadmap to Mesa2030: (X - Highlight the X to Align)

- Community - Objective 2: X
- Community - Objective 4: X
- Completion - Objective 3: X
- Completion - Objective 4: X
- Pathways and Partnerships - Objective 1: X
- Scholarship - Objective 2: X
- Scholarship - Objective 4: X
- Scholarship - Objective 5: X
- Stewardship - Objective 3: X

Action Plans	Action Plan Update
<p>Action Plan Status: Active</p> <p>Action Plan: Faculty will be requesting BARC funds for the necessary equipment.</p> <p>Action Plan Cycle: 2023 - 2024</p>	