

2020-2021
Unit Annual Report
Division of Academic Affairs
Unit: School of Health and Natural Sciences

I Mission and Goal/Outcomes Statement:

The mission of the School of Health and Natural Sciences is to help students develop the skills and habits of mind necessary for scientific inquiry and analysis in their professional, personal and civic lives. Faculty experts and engaged staff in the fields of biology, chemistry, earth and geographic sciences, exercise and sports science, mathematics, physics, psychological science, and nursing support students via foundational learning in the general education curriculum and mastery of content in a variety of majors. Our faculty offer classroom, laboratory, and clinical instruction as well as research opportunities in the sciences and health professions. Faculty and staff collaborate across the university and beyond to offer interdisciplinary learning opportunities.

The unit was part of a reorganization of campus academic structure during the last academic year. Two departments, Engineering Technology and Computer Science, were added to the School in January with the departure of the Dean of Business and Technology. The current report does incorporate those departments even though they were not part of the original academic plan. It should also be noted that the Mission statement above does not yet reflect the addition of the two departments. One goal for the upcoming year is to have the chairs work to redefine the statement to include all programs.

The goals for the year were to assist departments navigate the impacts of the pandemic, implement the new Liberal Arts and Sciences program, identify and develop new majors and revision of existing programs, prioritize Diversity and Inclusive Excellence Initiatives, emphasize student engagement with co-curricular programs, maintain regulatory compliance support for teaching and scholarly activities, manage personnel, and promote environmental stewardship.

II Personnel:

<u>Name</u>	<u>Position</u>
Hoey, Margaret	Dean

Support Staff

Guartafierro, Susan	Administrative Assistant II (July 1 – December 31, 2020)
Bertrand, Denise	Administrative Assistant II (January 1, 2021 – present)

III Facilities/Equipment:

The support of facility renovation and equipment was well supported within the school over the past year. Some key changes include:

- Nursing Simulation Center was moved into the pre-existing Health Services space and expanded in scope. New manikins were purchased as well as additional support

technology. Ian Murray was redeployed to provide technical support to the center while still retaining his role in EGS and Health and Safety.

- Renovation process of Conlin104 into a smart technology “maker” space began with the removal of old and outdated equipment and supplies. New equipment was purchased to populate the space with the latest technology
- Replacement of a built-in autoclave in the Antonucci Science Center.
- Purchase of a new ultra-low chest freezer by Biology and Chemistry
- Purchase 4 GymAware Linear Positional Transducer units with iPads by EXSS
- Purchase of standard patient care equipment such as hospital beds, patient lift, and defibrillators in Nursing
- Purchase of a drone for Earth and Geographic Sciences

IV Budget Expenditure Analysis:

Funds were used to pay for cell phone coverage, support of faculty scholarship, staff professional development, conference fees, and a vet. **Funds typically used for travel were utilized in other areas due to travel restrictions associated with the ongoing COVID Pandemic.**

V Programs/Activities:

Campus/School Oriented Activities

- Integration of Engineering Technology and Computer Science into the School of Health and Natural Sciences
- All four recipients of 2021 Faculty Awards Ceremony came from the school
- Support of two Residential Learning Communities
- Greater emphasis in Lifespan Development placed on diversity. Social Justice perspective integrated into several courses.
- Updated Human Subjects Federal Registration and recruited new IRB Chair
- Two Articulation Agreements with Husson University for Pharmacy and Physical Therapy were finalized.
- Supported STEM Transfer Academy with BHE funding of \$30,000
- Development of an Academic Practice Partner Relationship with Health Alliance Hospital
- Health Professions Advising was expanded to include Residential Learning Communities and a strategic plan.
- Environmental Public Health major was successfully revised
- Implementation of new Math pathways and remedial mathematics courses
- Earth and Geographic Sciences and Engineering Technology completed successful self-studies of their programs
- Holistic Admissions in Nursing were introduced
- Faculty Personnel Evaluations written for all levels of advancement
- Reorganization of Technician Support to align support with current needs within the School
- Recruited Faculty for Mathematics and Nursing
- **Supported the expansion of the Nursing SIM Center**
- All Departments successfully passed a Freshman Year Experience course and many

- departments had courses approved as part of the new Gen Ed program.
- Supported the DOE Solar Decathlon Design Challenge competition participation
 - Completion of ABET accreditation process pending for both majors with Computer Science
 - Engagement with Early College programs and the introduction of several cohort courses
 - Initiation of an Engineering Technology Advisory Board
 - Faculty members continued working with students on research projects and internships.
 - **Successful adoption of new teaching modalities for the academic year**
 - Anti-Racism Event: Teach Us All: A Panel Discussion on Segregation and & Education in the United States. Dean’s Antiracism Award Event
 - May 1 Future Falcon Day
 - Faculty Development Days in September, January, and May
 - Participation in the campus *Courageous Conversations*
 - Department Chairs Workshop
 - New Faculty Orientation

Outreach or Professional Engagement

- Rockwell Automation and PTC aim to facilitate the development of a center of excellence in the Northeast US, specifically in MA, to help enable and cultivate the next generation manufacturing workforce.
- Development of Micron as an internship site
- NACRO Corporate Engagement Bootcamp
- Three I’s: IACUCs, IBCs & IRBs, Biosecurity and Research Integrity Meeting

Committees Served – Dean

- Academic Affairs Leadership Team
- AUC Curriculum Committee
- Sustainability Committee
- STEM Inclusive Excellence Working Group
- Transfer Student Taskforce
- Dean’s Antiracism Fund
- Corporate Engagement
- NECHE Working Group Standards 1 – 3
- Institutional Animal Care and Use
- Institutional Review Board
- Biosafety Committee

VI Action Plan for 2020-21:

(Insert Action Plan for 20-21)

Planned Objectives AY 20-21	Performance Measures/Targets	Strategic Plan Goal & Strategy
Align programmatic learning goals with the Institutional Learning Priorities.	Programs will have considered how their programmatic learning goals connect with	1.1

	the LA&S core curriculum under the umbrella of the ILP framework.	
Implement and advance the LA&S curriculum.	All programs will have identified and submitted courses that contribute to the LA&S curriculum. Foundational and existing LA&S courses will be prioritized.	1.1
The Health Professions and Nursing Residential Learning Communities will be implemented for the AY21 year.	<p>The RLC is integrated with the Health Professions Advising Program with which includes specialized advising, guest speakers, and activities.</p> <p>For each RLC, a guiding document exists which outlines the purpose, objectives, and assessments. These documents will serve as a foundation for a generalized model which assists in connecting residential learning communities to academic programs. Assessments to gauge the impact of this High Impact Practice will be identified and implemented.</p>	1.2
Development of a strategic plan for the Health Professions Advising program.	The Health Professions Advising program will be institutionalized across multiple departments and advisors. Protocols and policies will promote the advising and recruitment of students, retention, and promote successful post-graduate goals. Co-curricular outcomes will be developed.	1.2
Complete external partnership agreement(s) (articulation or similar agreement) with at least one new college or university in FY20.	Two agreements with Husson University are currently in process. The progression of both agreements was impacted by COVID 19.	1.2 2.5
In conjunction with the Davis Foundation Grant, career core competencies will be identified and mapped which will allow students to articulate their preparedness for the world of work.	The Biology and Chemistry and Mathematics Departments will have successfully identified competencies and completed maps.	1.2 2.5
Connect successful outreach activities to facilitate internship and career opportunities for students at the department level to the Career and advising center.	Students are able to utilize the career center for internship and career placement. The career opportunities of students are more closely embedded into programs.	1.2

Interdisciplinary coursework will be part of a new Data Science and Statistics program at Fitchburg State.	A faculty member with the background and experience to lead the development of this program will be successfully hired.	1.3
Other possible IDS collaborations among members of the campus community will be considered.	One new IDIS course will be proposed.	1.3
The Environmental Public Health major will be revised to include distinct tracts in order to attract students and facilitate ease of transfer.	Three new tracks within the EPH major which will give students greater options and enhance transfer of students into the program.	1.4
The viability of implementing new majors.	Data Science and Statistics new faculty hire will determine the nature of the new major.	1.4
The viability of implementing new majors.	A final decision will be made on the Strength and Conditioning 4+1 and a possible Health Sciences major.	1.4
The viability of implementing new majors.	A preliminary plan to use a Psychological Science major for degree completion will be proposed.	1.4
Expand modalities of course delivery to consider how more flexible options could be structured into our traditional course offerings to allow for greater access by non-traditional or older students.	Diversified course delivery modalities throughout the School of HNS. Increase in the number of 7-week courses offered from within the School of HNS	1.7
Develop and promote common expectations for what an online class should be with particular attention given to experiential or laboratory experiences.	Guidelines will be established for best principles for online laboratories or experiential modalities.	1.7
Explore how student research could occur under new modalities.	Percentage of students completing a high impact practice increases even as access to campus is limited.	1.7
Implementation of new Math Readiness standards and the new developmental math courses.	Timely completion of first college credit bearing Math class by 1 st year students. Reduction in the number of students requiring remedial mathematics courses.	2.1
Implement a holistic admissions model in Nursing.	The Nursing incoming class more closely reflects the demographic make-up of the state.	2.1

Expand availability and utilization of open educational resources (OER) to reduce learning- related costs for students	An inventory completed of the number of Health and Sciences faculty using OER in their courses by end of the 2020-21 academic year. An increase in the number of faculty adopting OER resources.	2.1
Revisit the concept of a STEM Success Center, work with the Advising Center and Student Success Office to develop a multi-modality platform for STEM tutoring and support.	Improvement in the retention of students in STEM majors	2.2
Grant proposal to the Howard Hughes Medical Institute Inclusive Excellence competition, or other appropriate funding source, to fund professional development for faculty and staff to gain knowledge and skills to build equitable systems that are culturally sensitive and eliminate the achievement gap for our underrepresented student population.	The funds if awarded would be used for professional development of faculty members. Faculty members will be able to take part in training which will facilitate a shift to a focus of inclusive excellence in teaching, advising, and assessment.	2.2
Establish the Academic Dean’s Anti-Racism Fund. The fund will be a coordinated activity among the four academic Schools and the Amelia V. Gallucci-Cirio Library to support campus-wide and community-based anti-racism and anti-bias initiatives.	The Fund will support activities including but not limited to symposia, training, library resources, curriculum development, and educational programming. Initial monies will have been spent.	2.3
Make FSU’s majors more transfer-friendly and simplify the pathway and process for transfer students matriculating into the University.	<p>The STEM Transfer Academy will be used as a model to facilitate transfer of all students into the campus order to ease their transition especially for those coming from community colleges.</p> <p>Identify new potential transfer and articulation agreements especially for EPH.</p> <p>Programs with large numbers of transfer students such as the RN to BS or LPN to BS programs will have implemented a transfer</p>	2.4

	process which streamlines the process of admission.	
Identify barriers to completion within programs of study for transfer students.	Reduction in barriers with appropriate policy changes within program.	2.4
Begin the process developing a holistic model to deliver educational programming within departments that includes courses in both the day and SCGOE.	Integrate course schedule planning into a larger planning process to reduce the disconnect between the day and evening divisions.	2.4
Expand Residential Learning Communities and themed housing on campus to ensure that the representation within the communities reflects the same demographic as the campus as a whole.	Representation of students from diverse and underrepresented backgrounds are the same in the RLC as the majors in which they are studying.	4.1
Continue supporting the recruitment of faculty from diverse and traditionally underrepresented backgrounds in the recruitment and retention process.		4.1
Members of the FSU community will be stewards of the environment and will work together to make FSU a greener campus that embraces environmentally sustainable practices.	A larger number of faculty, staff and students will take full advantage of the sustainable options offered by Print Services to reduce environmental impact.	4.6
Transform the existing sustainability advisory committee into an action committee with greater ownership for implementation of suggestions it brings to the table	Faculty and staff members with appropriate expertise will become part of an action committee dedicated to improving the campus commitment to sustainable practices.	4.6
Participate in campus-wide discussions on how we define student success on this campus. Explore the meaning of educational justice in the sciences.	A clear vision of how student success is defined on campus with particular emphasis on success in STEM and Health programs of study.	5.1

Inventory or identify academic courses or programs with the School of HNS that offer diverse course offerings that focus on social justice, civil rights, responsive citizenship, and social awareness.	Increased awareness by faculty members and students about options to explore these concepts within the framework of their major.	5.1
Implement and integrate Academic Performance Solutions as a tool to use data to drive decisions within the school.	Chairs will have been introduced to the different metrics available from EAB and will have used at least one metric during the year.	6.2

VII Assessment Report for 2020-21

The School of Health and Natural Sciences underwent an expansion during the AY21 academic year. The Computer Science and Engineering Technology Departments were added to the existing school to increase the number of departments to 8. **Overall, the pandemic did not prevent the completion of many action items planned for the year but often slowed their progress towards completion.**

Planned Objectives AY 20-21	Outcomes Target: Reached, Ongoing, Pandemic Delayed	Strategic Plan Goal & Strategy
Align programmatic learning goals with the Institutional Learning Priorities.	Ongoing discussion as the new Gen Ed curriculum is implemented. Programs are reflecting on how their programmatic learning goals connect with the LA&S core curriculum under the umbrella of the ILP framework.	1.1
Implement and advance the LA&S curriculum.	Identification of LA&S courses was reached by each department. Ongoing submission will occur into next year. Reached All Departments now have a Freshman Year Experience course.	1.1
The Health Professions and Nursing Residential Learning Communities will be implemented for the AY21 year.	Reached: The RLC was integrated with the Health Professions Advising Program with which includes specialized advising, guest speakers, and activities. Pandemic Delayed For each RLC, a guiding document exists which outlines the purpose, objectives, and assessments. These documents will serve as a foundation for a generalized model which assists in connecting residential learning communities to academic programs. Assessments	1.2

	to gauge the impact of this High Impact Practice will be identified and implemented.	
Development of a strategic plan for the Health Professions Advising program.	Ongoing The Health Professions Advising program will be institutionalized across multiple departments and advisors. Protocols and policies will promote the advising and recruitment of students, retention, and promote successful post-graduate goals. Two advisors will now coordinate the work. Pandemic Delayed Co-curricular outcomes will be developed.	1.2
Complete external partnership agreement(s) (articulation or similar agreement) with at least one new college or university in FY20.	Reached Two agreements with Husson University completed and signed. Students may now enter a Pre-Pharmacy or a Doctor of Physical Therapy program.	1.2 2.5
In conjunction with the Davis Foundation Grant, career core competencies will be identified and mapped which will allow students to articulate their preparedness for the world of work.	Ongoing/Reached The Biology and Chemistry and Mathematics Departments have successfully identified competencies and are completing their final maps.	1.2 2.5
Connect successful outreach activities to facilitate internship and career opportunities for students at the department level to the Career and advising center.	Ongoing Pandemic delayed Departments are beginning to work more closely with the career center but the pandemic inhibited many activities and internships.	1.2
Interdisciplinary coursework will be part of a new Data Science and Statistics program at Fitchburg State.	Reached A faculty member with the background and experience to lead the development of this program was successfully hired.	1.3
Other possible IDS collaborations among members of the campus community will be considered.	Pandemic delayed One new IDIS course will be proposed.	1.3
The Environmental Public Health major will be revised to include distinct tracts in order to attract students and facilitate ease of transfer.	Reached Two new tracks within the EPH major were passed through campus governance. The total number of required courses were reduced.	1.4
The viability of implementing new majors.	Ongoing Data Science and Statistics new faculty hire will determine the nature of the new major.	1.4

The viability of implementing new majors.	Pandemic Delayed A final decision will be made on the Strength and Conditioning 4+1. Program will now seek accreditation first. Reached A Health Sciences major will not be proposed as it duplicates existing programs.	1.4
The viability of implementing new majors.	Ongoing An evaluation of the feasibility of a Psychological Science major through SGOCE was completed and a plan developed to continue the development process.	1.4
Expand modalities of course delivery to consider how more flexible options could be structured into our traditional course offerings to allow for greater access by non-traditional or older students.	Pandemic Delayed Diversified course delivery modalities throughout the School of HNS. Pandemic Delayed Increase in the number of 7-week courses offered from within the School of HNS	1.7
Develop and promote common expectations for what an online class should be with particular attention given to experiential or laboratory experiences.	Pandemic Delayed Guidelines will be established for best principles for online laboratories or experiential modalities.	1.7
Explore how student research could occur under new modalities.	Reached Faculty continued to offer opportunities for students for research.	1.7
Implementation of new Math Readiness standards and the new developmental math courses.	Ongoing Timely completion of first college credit bearing Math class by 1 st year students. Reduction in the number of students requiring remedial mathematics courses.	2.1
Implement a holistic admissions model in Nursing.	Ongoing The Nursing incoming class more closely reflects the demographic make-up of the state.	2.1
Expand availability and utilization of open educational resources (OER) to reduce learning- related costs for students	Reached An inventory completed of the number of Health and Sciences faculty using OER in their courses by end of the 2020-21 academic year. Ongoing An increase in the number of faculty adopting OER resources.	5.7
Revisit the concept of a STEM Success Center, work with the Advising Center and Student Success Office to develop a multi-modality platform for STEM tutoring and support.	Pandemic delayed Improvement in the retention of students in STEM majors	2.2
Grant proposal to the Howard Hughes Medical Institute Inclusive Excellence	Ongoing The HHMI Grant submission was not successful. The working group did however implement a book group and lecture series for the	

competition, or other appropriate funding source, to fund professional development for faculty and staff to gain knowledge and skills to build equitable systems that are culturally sensitive and eliminate the achievement gap for our underrepresented student population.	year. A grant was submitted to Balfour to fund 3 years of anti-racism professional development for faculty.	2.3
Establish the Academic Dean's Anti-Racism Fund. The fund will be a coordinated activity among the four academic Schools and the Amelia V. Gallucci-Cirio Library to support campus-wide and community-based anti-racism and anti-bias initiatives.	Reached The Fund supported activities including but not limited to symposia, training, library resources, curriculum development, and educational programming.	2.3
Make FSU's majors more transfer-friendly and simplify the pathway and process for transfer students matriculating into the University.	Ongoing The STEM Transfer Academy will be used as a model to facilitate transfer of all students into the campus order to ease their transition especially for those coming from community colleges. Pandemic delayed Identify new potential transfer and articulation agreements especially for EPH. Pandemic delayed Programs with large numbers of transfer students such as the RN to BS or LPN to BS programs will have implemented a transfer process which streamlines the process of admission.	2.4
Identify barriers to completion within programs of study for transfer students.	Ongoing Reduction in barriers with appropriate policy changes within program.	2.4
Begin the process developing a holistic model to deliver educational programming within departments that includes courses in both the day and SCGOE.	Ongoing Integrate course schedule planning into a larger planning process to reduce the disconnect between the day and evening divisions.	2.4
Expand Residential Learning Communities and themed housing on campus to ensure	Pandemic delayed Representation of students from diverse and underrepresented backgrounds	

that the representation within the communities reflects the same demographic as the campus as a whole.	are the same in the RLC as the majors in which they are studying.	4.1
Continue supporting the recruitment of faculty from diverse and traditionally underrepresented backgrounds in the recruitment and retention process.	Ongoing	4.1
Members of the FSU community will be stewards of the environment and will work together to make FSU a greener campus that embraces environmentally sustainable practices.	Pandemic delayed A larger number of faculty, staff and students will take full advantage of the sustainable options offered by Print Services to reduce environmental impact.	4.6
Transform the existing sustainability advisory committee into an action committee with greater ownership for implementation of suggestions it brings to the table	Ongoing and Reached Faculty and staff members developed a vision document dedicated to improving the campus commitment to sustainable practices.	4.6
Participate in campus-wide discussions on how we define student success on this campus. Explore the meaning of educational justice in the sciences.	Ongoing A clear vision of how student success is defined on campus with particular emphasis on success in STEM and Health programs of study.	5.1
Inventory or identify academic courses or programs with the School of HNS that offer diverse course offerings that focus on social justice, civil rights, responsive citizenship, and social awareness.	Reached The inventory of courses or programs which support Educational or Social Justice as well as Climate Change were completed.	5.1
Implement and integrate Academic Performance Solutions as a tool to use data to drive decisions within the school.	Reached Chairs were introduced to the different metrics available from EAB and will have used at least one metric during the year.	6.2
	The following items are from Business and Technology Strategic Plan	

Nominate PTEC Industry Fellows from all 3 departments	Reached Nomination of PTC fellows. Kaul, Mani, Whitefield, Yu, Basu all accepted nominations as PTC Industry Fellows (AGC/Unitil funding to help PTC Industry Fellows support ABEGT accreditation and integrate PTEC Software into courses.	
Upgrade existing QCC articulation agreements to reflect a core curriculum with concentrations as grouped electives.	Reached QCC articulation agreements in Manufacturing and Electronics updated. Pandemic delayed Revise document for Manufacturing and Electronics (ENGT-ETAC) and AS&T for joint completion degree (high mix of stackable certificates and prior learning assessment) with ABET ANSAC alignment. QCC and MWCC onboard to align workforce programs and prior learning assessment for pathways to tech degree (BS in AS&T).	
Extend ABET CAC reaffirmation (CS and CIS) from Dec 2022 to Dec 2025	Reached Williamson submitted RFE for CIS and CS by Jan 2021– no visit required. Ongoing Submit Interim Report for CIS and CS with results from assessment to demonstrate systematic improvement	
Obtain ABET ANSAC accreditation for AS&T	Pandemic delayed Williamson submits RFE for ANSAC by Jan 2021. ABET opens RFE application on Dec 1st. Kaul & Williamson to attend Institutional Representatives Day in July 2021 Kaul, Mani, Chenot begin assessment of Applied Sciences & Tech Learning Outcomes Kaul, Mani, Chenot submit AUC proposal to change math pathway to Business Calc or Stat for Applied Sciences & Tech	
Upgrade labs to conform with Experiential Learning and Workforce Alignment	Ongoing Upgrade existing machine shop in Conlon (CNIC 104) and replace obsolete equipment with smart CNC machines capable of interfacing with PTC cloud tools including collaboration CAD Onshape and augmented reality (AR) and industrial internet of things (IIoT) Vuforia Chalk. Additionally, install a help-desk, new door (with window), and Eaton mobile work tables and shop chairs.	
RLC Falcon Forge build a dune buggy Seniors working on capstones	Ongoing STEM LLC FalconForge (Basu/Lohmann/Whitfield/Mayo) to leverage solar decathlon and SAE Formula (600 cc engine in hand) capstone projects for AS&T and ET. Whitfield to visit ODU to pick up SAE Baja car. Williamson met with FalconForge faculty (Basu, Lohman, and Whitfield).	

<p>Expand corporate engagement</p>	<p>Ongoing Williamson (and then Hoey) to follow up on MOU and corporate partnerships with AIS, Micron, Epics, Jabil, PTC, and CRS.</p> <p>a. AIS next steps include MOA (draft available) and on- campus meetings with BSAD, GCE- CPS, ET, CS, and Early College with COO- Steve Savage, VP Sales Courtney Pirosko, Plant Manager Keith LeBlanc (Fitchburg State alum). Faculty/Staff: Robichaud, Chenot, Bau</p> <p>b. EPIC Industries next steps include MOA (draft available). Completed on campus visit with Plant Manager-Don Smallwood. Faculty/Staff: Robichaud, Yu, Moison, Basu</p> <p>c. AGC companies will continue to engage through MOA (draft available) and ENGT Advisory Board and on- campus Career Fair. \$100K gift to support renovation of CNIC 104 and preparations for Applied Sciences (CM) and ENGT for ABET accreditation. Faculty/Staff: Bry, Mani, Chenot, Wolfman, Scapparone, Crawley, Alves</p> <p>d. Jabil Healthcare Certificate Program. Lisa Moison and Wayne Whitfield submitting AUC proposals for 4 course core with 2 conc specific courses. Jabil Healthcare also ready for workforce training grant. CEO Steve Borges is FSU alum. Faculty/Staff: Moision, Whitfield, Basu, Yu, Wolfman</p> <p>e. PTC has reviewed draft MOA and provided enterprise system version of Onshape software (unlimited seats) through MOA that allow multiple teams to collaborate on CAD document. Transforms our capability address disruptions due to digital tools and teach CAD and Design Skills to industry expectations. Zink suggested a regional partnership with FSU as a hosting site. Faculty/Staff: Robichaud, Wolfman, Basu, Kaul, Mani, Whitfield, Swartz, Shane</p> <p>f. Unitil has signed an MOA and provided \$15K (\$5K per year for 3 years) to support ENGT capstone for solar decathlon and undergraduate research conference. Company reps will engage department on Advisory Board. Faculty/Staff: Wolfman, Kaul, Yu, Chenot, Gabar</p>	
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	g. Micron Products is reviewing MOA draft to engage 5-7 students (ENGT, App Sci, and COMM) students each semester. Faculty/Staff: Lapidus, Wolfman, Cardelle, Robichaud, Yu, Basu, Alves	
Seek External Funding	Reached NSF SSTEM Proposal # 20526 for \$1 million (Mani-PI, Day, Awasabisah, Yu, Williamson) for stem scholarships: DECLINED NSF drK12 Proposal #2101148 for \$2.9 million (Day-PI, Goss, Mani, Strittmatter) for a m-bIP approach for Early College High Schools submitted 10/07/202 DECLINED	

VIII Other Accomplishments:

A new IRB chair was recruited, Karen Keenan. Compliance training documents were reviewed and several updated.

IX Action Plan 2021-2022:

Planned Initiatives for 2021-22	Associated Strategic Plan Goal & Strategy	Indicate if a DEI initiative
GOAL ONE: Forge innovative paths to knowledge acquisition, career readiness, social mobility, and lifelong learning		
Alignment of the Gen Ed curriculum with majors throughout the school.	1.1	
The Health Professions and Nursing Residential Learning Communities will continue for AY22. Promote engagement with a new Sustainability RLC.	1.2, 4.1	
Developing a new vision of the Health Professions Advising program under the leadership team of Ron Krieser and Monica Maldari. Begin the development of program outcomes by which the success of the program may be measured.	1.2	X
Complete external Health Professions partnership agreement(s) (articulation or similar agreement) with at least one new college or university in FY22.	1.2	X
In conjunction with the Davis Foundation Grant, career core competencies will be identified and mapped which will allow students to articulate their preparedness for the world of work. Biology and Chemistry and Mathematics will complete their plans, Earth and Geographic Sciences and Psychological Science will continue to participate in the program.	1.2 2.5	

Connect successful outreach activities to facilitate internship and career opportunities for students at the department level to the Career and Advising Center.	1.2 2.5	
Develop a new Data Science and Statistics program at Fitchburg State.	1.3	
Broaden the themed campus-wide approach to curriculum opportunities by building an inventory and expanding course offerings associated with sustainability and climate change. (similar to Social Justice)	1.2	
Possible IDS collaborations among members of the campus community will be considered. A potential collaboration with ENGT and EGS under Applied Science and Technology will be explored.	1.3	
The development of an on-line Psychological Science major through SGOCE.	1.4 1.7 5.4	
Expansion of the Computer Science Master's program in association with Academic Partnerships.	1.5	
Strength and Conditioning 4+1 in EXSS. Program will apply for accreditation.	1.4	
Potential certificates will be explored in Nursing, Public Health, Environmental Science, GIS.	1.5 1.6	
Develop Certificate programs within Engineering Technology.	1.5 1.6	
Expand modalities of course delivery to consider how more flexible options could be structured into our traditional course offerings to allow for greater access by non-traditional or older students.	1.7	
Develop and promote common expectations for what an online class should be with particular attention given to experiential or laboratory experiences.	1.7	
Completion of the Occ/Voc Education program review.	1.4	
Addition of two concentrations within the MBA, CMGT and ENGT	1.5	
Collaboration with Humanities to incorporate Medical Spanish into Health Assessment	1.4	X
Implementation of new Public Health tracks.	1.4	
Begin revision of the NURS curriculum to coincide with changes to AACN Essentials: Core Competencies for Professional Nursing Education	1.4	

GOAL TWO: Become a model student-ready university and narrow the achievement gap		
Implementation of new Math Readiness standards and the new developmental math courses.	2.1	
Continue the implementation of holistic admissions in Nursing	2.1	X
Participate in developing Early College cohorts and Early College pathways to entry into college.	2.1	
Expand applied learning opportunities for students, in particular undergraduate research.	2.1	
Revisit the concept of a STEM Success Center, work with the Advising Center and Student Success Office to develop a multi-modality platform for STEM tutoring and support. Expansion of Math lab hours.	2.2	X
Support the professional development for faculty and staff to gain knowledge and skills to build equitable systems that are culturally sensitive and eliminate the achievement gap for our underrepresented student population.	2.2	X
Continue the Academic Dean's Anti-Racism Fund. The fund will be a coordinated activity among the four academic Schools and the Amelia V. Gallucci-Cirio Library to support campus-wide and community-based anti-racism and anti-bias initiatives.	2.3	X
Inclusive Excellence for Student Success: Grant and discussion group focused on STEM students will continue, Balfour Grant submitted.	2.1 2.3	X
Make FSU's majors more transfer-friendly and simplify the pathway and process for transfer students matriculating into the University.	2.4	
Identify barriers to completion within programs of study for transfer students.	2.4	
Develop pathways for careers in STEM. Identify new potential transfer and articulation agreements.	2.4	
Participation of Faculty in Real Talk Faculty Academy.	2.1 2.3 4.4	X
GOAL THREE: Be an engine of social, economic, civic, and cultural development in our city and region.		
Development of an Academic Practice Partner Relationship with Health Alliance Hospital	3.3	

Continue to build relationships with our corporate partners through the Corporate Engagement Committee.	3.3	
GOAL FOUR: Establish inclusive excellence, innovation, and environmental stewardship as signature strengths		
Expand Residential Learning Communities and themed housing on campus to ensure that the representation within the communities reflects the same demographic as the campus as a whole.	4.1	X
Continue with the modernization of the ENGT laboratories into model manufacturing “maker spaces”.	4.7	
Continue implementation of PTC software into ENGT curriculum.	4.7	
Implement the new EGS drone into the curriculum.	4.7	
Members of the FSU community will be stewards of the environment and will work together to make FSU a greener campus that embraces environmentally sustainable practices.	4.6	
Inventory and expand course offerings associated with sustainability and climate change.	4.6 6.5	
Continue to expand and utilize the new SIM Nursing Center.	4.7	
Equipment heavy departments develop a maintenance and refresh cycle.	4.7	
GOAL FIVE: Assert our distinctive value proposition and institutional learning outcomes boldly and widely		
Develop a vision of how student success is defined on campus with particular emphasis on success in STEM and Health programs of study	5.1	
Expand availability and utilization of open educational resources (OER) to reduce learning- related costs for students	5.7	X
GOAL SIX: Steward physical and financial resources responsibly and navigate a path to long-term organizational sustainability		
Implement and integrate Academic Performance Solutions as a tool to use data to drive decisions within the school.	6.2	
Oversee the three academic compliance committees, IACUC, IBC, and the IRB. CITI training guides will be updated. Policies will be reviewed and updated as needed.		

X Reflection:

Take this section to reflect on--

1) *Initiatives that you may be considering for 22-23 academic year that you did not already capture above.*

2) The School of Health and Natural Sciences adapted to operating under highly unusual and not always, desirable, circumstances during the pandemic. The operation of the Dean's office continued although many activities were impacted by the difficulty of completing work while working remotely. Technology enabled faculty to continue to participate in teaching, scholarship, advising, and community service. I am very proud of the members of my School for remaining active and engaged throughout the year. I am continuously impressed by the quantity and quality of the accomplishments by members of my School. Therefore, the faculty members within the School of HNS deserve the highest level of commendation for their work over the last year. It is clear that student success remained at the forefront of their thinking while operating under very difficult conditions. Last year I asked the chairs what their goals for the year were and they said "survival". They did so much more than survive.