#### 2024-2025

# Unit Annual Report Division of Academic Affairs

**Unit: School of Health and Natural Sciences** 

Please submit by June 1st to the AVP for Institutional Research & Planning

### 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.

#### II Personnel:

List all staff and note all personnel changes that occurred during 23-24.

<u>Name</u> <u>Position</u>

Patricia LaFountaine Administrative Assistant to the Dean

Jannette McMenamy, Ph.D. Dean, School of Health and Natural Sciences

#### III Facilities/Equipment:

N/A – See department reports. Facilities and equipment are located within each department.

#### IV Budget Expenditure Analysis:

Was the budget expended as planned? Were additions/changes made, and if so, explain.

The HNS budget supported School initiatives, including the HNS student ambassadors' program and a large biotechnology networking event for students (hosted in collaboration with Mass BioEd). Funds were allocated to support student and faculty research, faculty efforts to provide technical lab assistance, and faculty participation in important workshops (e.g., Mass Life Sciences, PKAL). Funds also supported professional development in administrative and curricular areas (e.g., Association of College Academic Deans workshop, Eduventures conference). UIF funds awarded to the School were used to support the embedded tutors program for key gateway STEM courses.

## V Programs/Activities:

List major campus activities, events etc. that the office participated in/supported; committees served; community outreach; etc. List events provided to current and prospective students. Also, provide professional development of all staff.

# Building Community as the New Dean of the School of Health and Natural Sciences

- Conducted a listening and visiting tour with all HNS departments and administrative offices (e.g., HNS Staff, SGOCE, Admissions, Student Affairs) (Fall 2024)
- Met monthly with all department chairs and twice per semester with all HNS Chairs (Fall 2024, Spring 2025)
- Sent Weekly Update Emails to Department Chairs (September May)
- Hosted faculty events in Fall 2024 and Spring 2025 in collaboration with the Deans of Arts & Sciences, Education, and the Library
- Served as Department Chair in Psychological Science, while also working as Interim Dean of HNS and B&T, until the end of September 2024 (avoiding a lapse in leadership in the department)
- Provided oversight for the HNS Student Ambassador program, engaging with students at multiple points throughout the semester (All HNS departments participated with at least one student from each department.)
- Attended department events, career nights, and campus events throughout the year
- Celebrated faculty accomplishments with personal notes throughout the year

#### Retention and Recruitment

- Worked closely with PIs of the National Science Foundation S-STEM grant to develop an organizational structure, including reimagining the professional development program, for faculty mentors. The first cohort of S-STEM scholars will enter the university in Fall 2025.
- Oversaw the 2<sup>nd</sup> year of implementing our Embedded Tutoring Program for key gateway STEM courses. As the Faculty Fellow for Innovation and Engagement, Daniel Welsh expanded the program to serve 350 students in 14 sections of STEM courses (Fall 2024 data). Almost 90% of students reported benefitting from their engagement with embedded tutors.
- Oversaw the High Impact Practice Coordinator in STEM. In his second year, Chris Cratsley coordinated multiple sessions, in collaboration with Career Services and Advising, for STEM students looking to pursue internships and employment.
- Continued to support the Inclusive Excellence study in Psychological Science, which involved a qualitative analysis of focus group data to support inclusive excellence initiatives in the department
- Supported the second year of the Health Professions Advising Program as funded by the University Innovation Fund grant. The program is under the direction of our pre-health advisors, Monica Maldari and Ronald Krieser. During this application cycle, FSU students have been successful applicants to medical and dental schools, doctoral programs in physical therapy, and accelerated bachelor's programs in nursing.
- Provided support for current (and future) HNS initiatives directed at improving retention, specifically Math's initiatives to assess non-major, gateway math courses and the development of a "boot camp" for students entering our Nursing

- program. The Nursing "boot camp" will be held in August so that first-year students can hit the ground running and be prepared for Fall.
- Collaborated with Nermin Bayazit, Mojdeh Bayat, and Drew Goodwin to effectively implement the MassTeach scholarship program
- Monitored Slate, collaborated with Admissions, and discussed funnel reports with department chairs
- Met with Enrollment Management to discuss targeted marketing for key academic programs (e.g., EXSS)
- Attended Open Houses and Future Falcon Days, and suggested HNS ambassadors for department-specific shadow days
- Sent targeted emails and texts to unregistered students in all HNS departments
- Maintained a strong open-door/open-access approach to connecting with students, meeting with any student who needed assistance in HNS departments

## Supporting Curricular Innovation and the Ongoing Provision of High-Quality Programs

- Supported the Department of Mathematics' initial conversations about a new major in Middle School Math
- Discussed (ongoing conversations) the development of an interdisciplinary Master's degree in Sustainability, in partnership with Rhine-Waal University
- Participated in program review efforts (e.g., editing self-studies, meeting with Chairs and external reviewers) in Public Health Science, Biology, and Chemistry
- Participated in the Eduventures conference, as part of our review of academic programs, in June 2025 as a representative of the FSU team
- Collaborated on faculty searches in Mathematics (2 positions), Psychological Science, Exercise and Sports Science, Nursing, Public Health Science, and Biology
- Worked with Nursing to address their faculty hiring crisis. We reimagined current positions, investing in two current employees, and we are currently working with a search firm to hire for critical positions in mental health and chronic illness.
- Led the restructuring of laboratory technician positions in Biology and Chemistry and Environmental, Geographic, and Public Health Sciences, creating 2 positions that are better aligned with departmental needs and that will yield cost savings.
- Collaborated with AVP Barricelli and VP Luster to develop a process and academic travel form to support student travel to academic conferences. Resulted in a current student and an alumna being able to present at an academic conference supported by Reid Parson's NASA grant.
- Supported the Mathematics Department's efforts to redesign their major as part of a key action item identified in their AY 23-24 self-study
- Reviewed curriculum proposals and provided feedback to department chairs prior to AUC submission

## **Expanding and Enhancing External Partnerships**

- Articulation agreements signed: Mount Wachusett Community College (Environmental Conservation to our Environmental and Earth Science Program) – spearheaded by Elizabeth Gordon
- Implemented an articulation agreement, providing certificates of celebration and completion to students from Monty Tech who successfully passed Anatomy & Physiology (allowing them 4 academic credits here)
- Partnerships in development or expanded: Abbvie, Phospohrex, UMass Chan Medical School, Health Alliance, Monty Tech, Ultragenyx, Biomere; Nashua River Watershed Association; NewVue Communities
- Supported conversations with Northeastern about a 4+1 in Biotechnology (spearheaded by Daniel Welsh in his Faculty Fellow role)
- Led conversations with Veteran's Affairs about partnering on their Med Lab Scientist Program, in collaborating with Daniel Welsh
- Industry Advisory Board: Participated in events held by Nursing
- Supported Lisa Moison in meetings to establish external partnerships with Beth Israel Lahey Hospitals, the North County Land Trust, and the Stone Living Laboratories
- Outreach: Supported STEM Month events across campus and in the community, including a community meeting sponsored by NewVue Communities and the Nashua River Watershed Association on green solutions

## Operations/Committees

- Served as Institutional Official for all compliance committees (IRB, IACUC, IBC)
- Committees: Institutional Review Board (*ex-officio*); Institutional Animal Use and Care Committee (*ex-officio*); Institutional Biosafety Committee (*ex-officio*); AUC- Curriculum Committee; Provost Council; Global Ambassador Scholarship review committee; Search Committee for Director of Human Resources; Head of Search Committees for Lab Technicians in EGPHS and Chemistry (June, 2025 searches)
- Invited remarks or attendance: Psychological Science Psi Chi Induction (04/18/2025); Mass ClimateTech Hub Meeting at WPI (4/1/2024); Mass BioEd LifeSciences Workforce Conference Educator/Industry Working Session (6/2/25)
- National, State, and Regional Conferences/Professional Development Meetings attended: Association of College Academic Deans Annual Institute (11/19/24); Mass ClimateTech Hub at WPI (4/1/25); MassBioEd Life Sciences Workforce Conference (6/2/25); Eduventures Conference (6/14 16/25)

# VI Action Plan for 2024-25:

Planned Initiatives for 2024-25  Building a Sense of Community in the School of H	Associated Strategic Plan Goal & Strategy Goal # followed by Strategy # ex: 3.2 Or NECHE Projection  Iealth and Natural Sciences	Indicate if a DEI initiative
Continue HNS communications at the School, department chair through All-School meetings and email	4.5, 5.6	
Continue and improve HNS Student Ambassador Program	4.2	
Continue HNS Dining Together Program	4.2	X
Plan a guest speaker series and other events that brings together the faculty, staff, and students	1.2, 1.3, 1.4	
Plan an engaging, well-attended STEM Week	1.2, 1.3, 1.4, 3.6	X
Recruitment		
Enhance academic collaboration and communication with the Admissions office and Student Affairs	2.6, 5.3, 5.6	
Continue work with Slate data to provide analysis regarding yield and trends to HNS department chairs throughout the recruitment cycle.	5.6	
Work with Department Chairs, Admissions, and Marketing to create a strategic enrollment plan for majors, and targeted marketing videos and materials.	2.6	
Continue multi-faceted efforts to recruit students – STEM Shadow Days, specialized tours, Email-athons, virtual sessions, etc.	2.6	
Supporting Curricular Innovation Support ENGT in curricular change process and	1.2, 1.4	
alignment to ABET standards.	,	
Support Biology & Chemistry to identify new courses/minors and collaborations which will help prepare our students for a vibrant industry (e.g.	1.2, 1.3, 1.4	

Bioinformatics, animal husbandry, biotech management)			
Support Psychological Science as they roll out the new curriculum in Fall 2023.	1.2, 1.4		
Support Exercise and Sport Science through their self-study and possible M.S. Strength & Conditioning program.	1.2, 1.4, 6.2		
Support Nursing's shift to competency-based outcomes.	1.2		
Work with all programs to identify innovative, interdisciplinary courses, minors, and certificates that meet the needs of the workforce.	1.2, 1.4, 1.7, 6.2		
Retention			
Launch multifaceted Health Professions Meta Advising and Mentorship Program	2.1		
Work collaboratively with Mathematics, Student Success, and Institutional Research to analyze Math Pathways and Math Placement success.	1.1	X	
Expanding and Enhancing External Partnerships			
Identify new industry and educational partners for all departments.	3.1, 3.2, 3.3		
Enhance alumni relations through the development of a School newsletter.	3.6		
Formalize internship agreements with industry partners.	3.1, 3.2, 3.3		
Develop new articulation agreements and dual enrollment agreements	3.1, 3.2, 3.3		
Bolster support for high-impact practices			
Identify and support a new High-Impact Practice Coordinator.	1.2, 1.3, 1.4		
Continue to assist departments in pre- and post-award support.	4.5, 4.4	Х	

# VII Assessment Report for 2024-25

Were the Action Plan objectives met? **Provide in list or table format that parallels item VI above**.

Planned Initiatives for 2024-25	Associated Strategic Plan Goal & Strategy Goal	Were the objective met?
Building a Sense of Community in the School of	Health and Natural	Sciences
Continue HNS communications at the School, department chair through All-School meetings and email	4.5, 5.6	Yes
Continue and improve HNS Student Ambassador Program	4.2	Yes
Continue HNS Dining Together Program	4.2	No (discontinued based on reports of low attendance from prior year)
Plan a guest speaker series and other events that brings together the faculty, staff, and students	1.2, 1.3, 1.4	Yes, to events for faculty, need more across all groups
Plan an engaging, well-attended STEM Week	1.2, 1.3, 1.4, 3.6	Yes, focused on STEM <i>month</i> activities
Recruitment		
Enhance academic collaboration and communication with the Admissions office and Student Affairs	2.6, 5.3, 5.6	Yes, Ongoing
Continue work with Slate data to provide analysis regarding yield and trends to HNS department chairs throughout the recruitment cycle.	5.6	Yes, Ongoing (data now provided to us – used in discussions)
Working with Department Chairs, Admissions, and Marketing to create a strategic enrollment plan for majors, and targeting videos and materials	2.6	Ongoing (met with Rich Toomey, will continue under the new structure of enrollment management)
Continue multi-faceted efforts to recruit students  – STEM Shadow Days, specialized tours, Emailathons, etc.	2.6	Yes, Ongoing (ambassadors were available for events, one visit cancelled by Monty Tech), not all initiatives completed

Supporting Curricular Innovation			
Support ENGT in curricular change process and alignment to ABET standards.	1.2, 1.4	Yes, Ongoing	
Support Biology & Chemistry to identify new courses/minors and collaborations which will help prepare our students for a vibrant industry (e.g. Bioinformatics, animal husbandry, biotech management)	1.2, 1.3, 1.4	Yes, Ongoing	
Support Psychological Science as they roll out the new curriculum in Fall 2023.	1.2, 1.4	Yes	
Support Exercise and Sport Science through their self-study and possible M.S. Strength & Conditioning program.	1.2, 1.4, 6.2	No (Self-study was not this year and program discussions on hold.)	
Support the new, interdisciplinary Data Analytics minor (Math, CS, EGS).	1.2, 1.3, 1.4	Yes, courses offered	
Support Nursing's shift to competency-based outcomes.	1.2	Yes, APRs (grant-funded)	
Work with all programs to identify innovative, interdisciplinary courses, minors, and certificates that meet the needs of the workforce.	1.2, 1.4, 1.7, 6.2	Ongoing	
Work collaboratively to support the alignment of the Facilities Master Plan to the academic program plans within the School of Health and Natural Sciences	6.5	No (Item developed by previous dean – unsure of what this is)	
Retention			
Launch multi-faceted Health Professions Meta Advising and Mentorship Program	2.1	Yes, Ongoing	
Work collaboratively with Mathematics, Student Success, and Institutional Research to analyze Math Pathways and Math Placement success.	1.1	Yes, Ongoing (APR for gateway Gen Ed math assessment)	
Expanding and Enhancing External Partnerships			
Identify new industry and educational partners for all departments.	3.1, 3.2, 3.3	Yes, Ongoing	
Enhance alumni relations through the development of a School newsletter.	3.6	No, item from previous dean	
Formalize internship agreements with industry partners.	3.1, 3.2, 3.3	Ongoing and at a department level	

Develop new articulation agreements and dual enrollment agreements	3.1, 3.2, 3.3	Yes
Bolster support for high-impact practices		
Identify and support a new High-Impact Practice Coordinator.	1.2, 1.3, 1.4	Yes
Continue to assist departments in pre- and post-award support.	4.5, 4.4	Yes

# VIII Other Accomplishments:

List accomplishments not already captured above.

Proposal Title	Funder	Amount
S-STEM: Building Institutional	National Science Foundation	\$1,000,000
Capacity to Support STEM Scholars		
through the Pedagogy of Real Talk		
Establishing a Simulation Laboratory	Elaine Nicpon Marieb	\$ 575,818.00
within a Competency-Based	Foundation	
Curriculum (Years 1&2)		
Health Professions Meta Advising and	Fitchburg State University's	\$103,335
Mentorship Program	University Innovation Fund	
Sub-Contract - Nashua River	<b>Environmental Protection</b>	\$50,000
Watershed and New Vue	Agency*	
Communities Partnership for Green	(*Cancelled in late spring)	
Spaces in Fitchburg	2 2:	
AY 2024-2025 HNS Grants in Post	\$ 1,729,153	
Award Management/Oversight		

# IX Action Plan 2025-2026:

	T	1
Planned Initiatives for 2025-26	Associated Strategic Plan Goal & Strategy Goal # followed by Strategy # ex: 3.2 Or NECHE Projection	Indicate if a DEI initiative
Building a Sense of Community in the School of H		ences
Dunuing a Sense of Community in the School of In	icaith and Ivatural Scr	circes
Continue HNS communications in the School	4.5, 5.6	
through All-School meetings & updates as we come		
together without B&T		
Collaborate with other academic deans on	4.2	
programming to bring together all Schools,		
promoting community across the university		
Rebrand the HNS Student Ambassador Program to	4.2	
differentiate from Presidential Ambassadors and	7.2	
better meet the needs of the school		
	4.2	X
Plan a social event that brings together faculty,	4.2	Λ
staff, and students		
Plan/Support academic events (e.g., guest speakers)	1.2, 1.3, 1.4	
that include and engage faculty, staff, and students		
	12121426	X
Plan/Support engaging, well-attended STEM Week	1.2, 1.3, 1.4, 3.6	A
(Month) activities		
Recruitment		
	265256	<u> </u>
Enhance academic collaboration and	2.6, 5.3, 5.6	
communication with the Admissions office and		
Student Affairs		
Utilize Slate and other enrollment data to identify	2.6	
trends and review plans for academic course		
offerings in future academic semesters		
Collaborate with Department Chairs, Admissions,	2.6	
Marketing, and Enrollment Management to develop		
targeting marketing efforts for departments within		
HNS		
Continue multi-faceted efforts to recruit students,	2.6	X
including the development of new programs to		
recruit (e.g., Geek Squad Academy for middle and		
high school students)		
,		

Supporting Curricular Innovation			
Support Biology & Chemistry as they develop and begin to implement action plan items from their	1.2, 1.3, 1.4	X	
recently completed self-study  Support Biology & Chemistry as they consider new mechanisms to provide high-impact practices to	1.2, 1.3, 1.4		
students (e.g., co-ops), preparing them for positions in growing industry sectors  Support Public Health Science as they develop and	1.2, 1.3, 1.4		
begin to implement action plan items, including hiring a PHS faculty member  Support Mathematics as they roll out their new	1.2, 1.4		
curriculum  Continue to explore and support the possible	1.2, 1.3, 1.4		
development of a new major in Mathematics Middle School Education Support Psychological Science as they engage in	1.2, 1.4		
their self-study and consider ways to recruit additional majors & bolster enrollment in the Psychological Science minor	1.2, 1.4		
Support Exercise and Sport Science through their (re-scheduled) self-study and discussions of a possible M.S. Strength & Conditioning program.	1.2, 1.4, 6.2		
Support Nursing's shift to competency-based outcomes and their curricular revisions	1.2		
Support Nursing's work on CCNE reaccreditation, including their site visit	1.2, 1.4		
Support Mathematics efforts to assess key gateway Mathematics courses	1.1, 1.4		
Work with all programs to identify and promote curricular opportunities (e.g., courses, certificates, interdisciplinary opportunities) that align with workforce needs	1.2, 1.4, 1.7, 6.2		
Retention			
Continue to support the multifaceted Health Professions Meta Advising and Mentorship Program	2.1		
Continue to support the dean's fellow, in collaboration with ACT, in his work to implement our embedded tutoring program	2.1, 2.2		

Work collaboratively with the NSF S-STEM PIs to support grant activities, including the retention (and recruitment) of students in the program  Collaborate with and support Nursing in their efforts to increase retention in their program (e.g., Nursing Boot Camp)	1.1, 2.2, 2.3, 2.5, 5.1 2.1, 2.2,	X
<b>Expanding and Enhancing External Partnerships</b>		
Research and development new industry and educational partners for HNS departments.	3.1, 3.2, 3.3	
Develop internship agreements with industry partners.	3.1, 3.2, 3.3	
Formalize new articulation agreements and dual enrollment agreements	3.1, 3.2, 3.3	
Work with PHS and Nursing to develop an articulation agreement with an ABSN program (thus helping to retain students who are not immediately successful in our pre-Nursing program)	2.1, 2.6, 3.1	
Sponsor programs with external partners (e.g., high schools, community groups) that raise awareness of FSU and bring groups to campus	3.4, 3.5, 3.6,	
Bolster support for high-impact practices		
Continue to support the HNS High-Impact Practice Coordinator as he works to develop programs and partnerships that benefit students	1.2, 1.3, 1.4	
Partner with the Office of Research and Sponsored Programs to assist departments with pre- and post-award support.	4.5, 4.4	X

Updates to the Action Plan may be submitted via a revised Annual Report.

#### Reflection:

Take this section to reflect on--

1) Initiatives that you may be considering for 24-25 academic year that you did not already capture above.

I will continue to evaluate this plan throughout the 25-26 academic year to ensure that initiatives are aligned with strategic priorities that may emerge with transitions in areas such as Enrollment Management and Marketing.

2.) Anything else not captured in this report that you would like to share.

A number of department annual reports are still pending. I would be happy to revise this report based on new information that comes in from departments.