# 2023-2024 Unit Annual Report Division of Academic Affairs Unit: Health and Natural Sciences

Please submit by June 1<sup>st</sup> 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>	Position
Patricia LaFountaine	Administrative Assistant to the Dean
Jennifer Hanselman, Ph.D.	Dean

#### III Facilities/Equipment:

N/A – see department reports

#### IV Budget Expenditure Analysis:

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

Funds supported School initiatives, including the HNS Student Ambassadors, Embedded Tutoring, guest speakers, and a large scale Biotech ribbon-cutting and networking event. In addition, funds were allocated to the students through meetings and events, travel to external meetings, and work related to student success, curricular innovation and research.

### 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 a Sense of Community in the School of Health and Natural Sciences

- Fall 2023, Spring 2024 All-School Meetings (Spring was a social event only)
- Weekly emails to Department Chairs (August-May)
- Organized the HNS Student Ambassador program (18 students participated, representing all HNS departments)
- Offered Dining Together program for the entire year.
- Attended at least one department meeting for all HNS departments
- Met with HNS Staff in Fall 2023, Spring 2024
- Attended department events, career nights, Development Day, campus events

#### <u>Recruitment</u>

- Collaborated with Admissions and accessed Slate regularly.
- Beginning in February, prepared weekly funnel reports and deposit trend data for all department chairs (at school and department/major level).
- Attended all Open Houses and Future Falcon Days
- Invited HNS Student Ambassador participation in all events
- Organized STEM Shadow Days
- Offered a virtual Future Falcon session for all accepted students
- Sent targeted emails to accepted transfer students to

#### **Supporting Curricular Innovation**

- Served as the University's point person for EAB Watermark Insights
- Launched the Data Analytics minor
- Discussed curriculum proposals with department chairs prior to AUC

#### **Retention**

- Fully launched Embedded Tutoring Program in ten courses (see UIF report)
- Organized and led the HNS Student Ambassador program (18 students participated, representing all HNS departments)
- Launched new HIP Coordinator (January 2024)
- Launched new Faculty Fellow for Innovation and Engagement
- Successfully implemented Year 1 of the UIF proposal (2023-2024) to formally develop a Health Professions Meta Advising and Mentorship Program.
- Worked with Math, Student Success regarding Math Pathways data and Math Placement analyses

Expanding and Enhancing External Partnerships

- Articulation agreements signed: Husson University (DPT, PharmD)
- Partnerships in development or expanded: Bristol-Myers Squibb, Charles River Lab, AbbVie, Health Alliance, Monty Tech
- Industry Advisory Boards: Nursing, Biotechnology
- Outreach: STEM Week; Served as Massachusetts State High School Science & Engineering Fair Judge; Central Massachusetts STEM Network; North Central Chamber

# **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; Safety Committee; Sustainability Committee; CCE Workgroup; CCE Workgroup Community Engagement subcommittee; Provost Council; NEH Summer Stipend application review committee; AIF 2024-2025 Review Committee; Global Ambassador Scholarship review committee;
- Invited remarks/attendance: ROTC Cotillion (10/12/2023); Biotech panel moderator (04/10/2024); Mathematics Honors Society induction (03/22/2024); Psychological Science Psi Chi Induction (04/18/2024); ROTC Awards at WPI (4/24/2024); ClimateTech Meeting at WPI (06/04/2024); PKAL Mass Chapter Conference Opening Remarks (6/12/24)
- National, State, and Regional Conferences/Meetings attended: MassTeach Leadership Team (monthly); ClimateTech at WPI (June 4, 2024); MassBioEd Life Sciences Workforce Conference (June 11, 2024);

# VI Action Plan for 2023-24:

(Insert your 23-24 Action Plan from last year's report)

Planned Initiatives for 2023-24	Associated Strategic Plan Goal & Strategy Goal	Indicate if a DEI initiative
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	
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 bring 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	
Working with Department Chairs and HNS Student Ambassadors, incorporate "What Makes Us Great" into recruitment opportunities, on and off-campus	2.6	
Continue multifaceted efforts to recruit students – STEM Shadow Days, specialized tours, Email-a-thons, etc.	2.6	
Supporting Curricular Innovation		
Support ENGT in curricular change process and alignment to ABET standards.	1.2, 1.4	
Support Biology & Chemistry to identify new courses/minors and collaborations which will help prepare our students for a vibrant industry ( <i>e.g.,</i> Bioinformatics, animal husbandry, biotech management)	1.2, 1.3, 1.4	

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 the new, interdisciplinary Data Analytics minor (Math, CS, EGS).	1.2, 1.3, 1.4	
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	
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	
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	x

# VII Assessment Report for 2023-24

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

Planned Initiatives for 2023-24	Associated Strategic Plan Goal & Strategy Goal	Were the objectives met?
Building a Sense of Community in the School of Health	and Natural Scien	ces
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, expanded
Continue HNS Dining Together Program	4.2	Yes
Plan a guest speaker series and other events that bring together the faculty, staff, and students	1.2, 1.3, 1.4	Yes
Plan an engaging, well-attended STEM Week	1.2, 1.3, 1.4, 3.6	Yes, but attendance was still low
Recruitment		
Enhance academic collaboration and communication with the Admissions office and Student Affairs	2.6, 5.3, 5.6	Ongoing
Continue work with Slate data to provide analysis regarding yield and trends to HNS department chairs throughout the recruitment cycle.	5.6	Yes
Working with Department Chairs and HNS Student Ambassadors, incorporate "What Makes Us Great" into recruitment opportunities, on and off-campus	2.6	Ongoing
Continue multifaceted efforts to recruit students – STEM Shadow Days, specialized tours, Email-a-thons, etc.	2.6	Yes, also created a virtual Future Falcon Day.
Supporting Curricular Innovation		
Support ENGT in curricular change process and alignment to ABET standards.	1.2, 1.4	Ongoing, with an APR and multiple department meetings

Support Biology & Chemistry to identify new courses/minors and collaborations which will help prepare our students for a vibrant industry ( <i>e.g.,</i> Bioinformatics, animal husbandry, biotech management)	1.2, 1.3, 1.4	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	Yes, successful site visit
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
Retention		
Launch multifaceted Health Professions Meta Advising and Mentorship Program	2.1	Yes
Work collaboratively with Mathematics, Student Success, and Institutional Research to analyze Math Pathways and Math Placement success.	1.1	Yes
Expanding and Enhancing External Partnerships		
Identify new industry and educational partners for all departments.	3.1, 3.2, 3.3	Ongoing
Enhance alumni relations through the development of a School newsletter.	3.6	Not yet
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
Moderna Research Fellows Program	Moderna Charitable	\$56,151.00
	Foundation	
S-STEM: Building Institutional Capacity	National Science	\$1,000,000
to Support STEM Scholars through the	Foundation	
Pedagogy of Real Talk		
MLSC Workforce Development Capital	Mass Life Sciences Center	\$ 746,316.33
Grant Program		
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	\$103,335
Mentorship Program	University's University	
	Innovation Fund	
AY 2023-2024 Grants Managed in	۵ \$ 2,481,620.33	
Post-Award		

# IX Action Plan 2024-2025:

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

Planned Initiatives for 2024-25 Add more rows as needed Building a Sense of Community in the School of Health a	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 Health a		>
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 bring 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	Х
Recruitment	1	
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 multifaceted efforts to recruit students – STEM Shadow Days, specialized tours, Email-a-thons, virtual sessions, etc.	2.6	
Supporting Curricular Innovation		
Support ENGT in curricular change process and alignment to ABET standards.	1.2, 1.4	

Support Biology & Chemistry to identify new courses/minors and collaborations which will help prepare our students for a vibrant industry ( <i>e.g.</i> , Bioinformatics, animal husbandry, biotech management) Support Psychological Science as they roll out the new curriculum in Fall 2023.	1.2, 1.3, 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	x

### X 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.

In a time of transition with the new President, I believe that new initiatives will need to be aligned to new strategic goals. All of these efforts listed in the table above require resources, therefore, I will need to seek external funding and other sources of support to ensure successful and sustainable implementation.

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

After reading the department annual reports, discussing this report with the Provost, and continuing to reflect upon the year, this report will be revised in the coming weeks.