FORT WAYNE SENATE AGENDA
MONDAY
January 8, 2024
12:00 P.M., KT G46

1. Call to order

2. Approval of the minutes of December 11

3. Acceptance of the agenda – J. Johns

4. Reports of the Speakers of the Faculties
   a. Deputy Presiding Officer – N. Younis
   b. IFC Representative – B. Buldt

5. Report of the Presiding Officer – C. Lawton

6. Special business of the day

7. Unfinished business
   a. General Education Program, SD 23-5 – EPC, S. Hanke (for discussion/vote)
   b. Rubric for Sabbatical Applications, SD 23-6 – FAC, W. Sirk (for discussion/vote)

8. Committee reports requiring action
   a. English Proficiency for Undergraduate Applications, SD 23-8 – EPC, S. Hanke (for discussion/vote)
   b. Policy on Deadnaming, SD 23-9 – EPC, S. Hanke (for discussion)
   c. Academic Regulations in Regards to AI, SD 23-10 – EPC, S. Hanke (for discussion)
   d. Revision Senate Bylaws re MAAS, SD 23-11 – SAC, N. Younis (for discussion)

9. New business

10. Question time
    a. RE: Higher Education Enrollment, SR 23-15 – A. Nasr

11. Committee reports "for information only"
    a. Master's Degree in Applied Physics, SR23-16 – GradSub, K. Fineran
    b. PFW AI Resource Group, SR23-19 – EPC, S. Hanke

12. The general good and welfare of the University

13. Adjournment*

*The meeting will adjourn or recess by 1:15 p.m.

Approved	Opposed	Abstention	Absent	Non-Voting
B. Buldt			K. Barker	C. Ortsey
J. Johns				
C. Lawton				
A. Nasr				
D. Tembras				
N. Younis				

Attachments:
"Revision of General Education Program" (SD 23-5)
"Approval of Rubric for Sabbatical Applications" (SD 23-6)
"Updates to Countries Exempt from English Proficiency for Undergraduate Applications" (SD 23-8)
"Responding to Concerns from Campus Climate Survey: Deadnaming" (SD 23-9)
"Updating Academic Regulations in Regards to Artificial Intelligence (AI)" (SD 23-10)
"Proposal for Revision Senate Bylaws - MAAS" (SD 23-11)
"Question Time – re: Higher Education Enrollment" (SR No. 23-15)
"Graduate Program Proposal: Master's Degree in Applied Physics" (SR No. 23-16)
"Purdue Fort Wayne: AI Resource Group" (SR No. 23-19)

Senate Document SD 23-5

MEMORANDUM

TO: Fort Wayne Senate

FROM: Steven A. Hanke, Chair of the Education Policy Committee

DATE: 10/10/2023

SUBJ: Revision of General Education Program

WHEREAS, the Educational Policy Committee (EPC) is the parent committee of the General Education Subcommittee; and

WHEREAS, the General Education Subcommittee requested that EPC review a resolution to revise the General Education program; and

WHEREAS, EPC completed the review and voted in support of the document going forward;

BE IT RESOLVED, That the attached resolution be considered by the Senate.

Approved	**Opposed**	**Abstention**	**Absent**	**Non-Voting**
Stephen Buttes				Chris Huang
Patricia Eber				Teri Swim
Steven Hanke				
Andres Montenegro				
Erik Ohlander				
Promothes Saha				

TO: Steven Hanke, Chair of the Education Policy Committee

FROM: Carol Lawton, Chair of the General Education Subcommittee

DATE: 8/28/2023

SUBJ: Proposal for Revision of the General Education Program

WHEREAS the current General Education program is primarily a distribution arrangement that limits the ability of students to experience a meaningful program that helps them understand how a broad and liberally based education prepares them for life and work after graduation, and

WHEREAS, more systematic assessment of General Education learning outcomes at the program level has been recommended by the Higher Learning Commission, and

WHEREAS, an Artistic Ways of Knowing category would ensure that students are exposed to the arts, an area integral to the quality of everyday life and valued by our university and community, and

WHEREAS, a Diversity, Equity, Inclusion and/or Global Awareness focus in selected courses within Ways of Knowing categories would align to the Strategic Plan emphasis on embracing values that support diversity, equity, inclusion, and global awareness, and

WHEREAS, the current program includes courses that are not generally accessible to freshmen and sophomores across majors, such as in the Capstone category,

BE IT RESOLVED, that the General Education program be revised to provide students a more meaningful educational experience by framing the program in a way that promotes understanding of the purpose of General Education coursework and enhances student ownership of their path through the program; to ensure exposure to the arts and to issues of diversity, equity, inclusion and global awareness; to facilitate assessment at the program level through a common reporting structure; and to provide coursework outside of the major that sets the groundwork for further learning by being accessible to freshmen and sophomores, as detailed in the attached proposal.

In Favor	Against	Abstain
Jeff Casazza	Guoping Wang	
Steven Cody		
Carl Drummond		
Carol Lawton		
Andres Montenegro		
Sherrie Steiner		
Sarah Wagner		

Proposal for Revision of the General Education Program
October 2, 2023

Purpose

The proposed revision of the General Education program is intended to better align it with the Indiana College Core (ICC; https://transferin.net/ways-to-earn-credit/statewide-transfer-general-education-core-stgec/) as well as the PFW Strategic Plan (https://www.pfw.edu/strategic-plan/documents/128-CHAN-Strategic-Plan-Trustee-Mtg-Booklet-2022.pdf) and to address concerns with certain aspects of the current program. One concern with the current General Education program is that it is not widely perceived as a coherent program with a purpose and value distinct from that of a student's major. General education and degree program requirements are conflated by the practice of "prescribing" specific general education courses within degree plans, which creates confusion for students who change majors or who transfer a completed general education curriculum from another institution. In addition, two areas of the current program (Interdisciplinary or Creative Ways of Knowing and Capstone Experience) do not align with the ICC, while at the same time students are able to avoid taking courses representing the Artistic Way of Knowing, an area of general education that has a strong presence at PFW. Students also may not be exposed in the current program to approaches that focus on diversity, inclusion, equity, and global awareness, as emphasized in the PFW Strategic Plan.

The proposed revision seeks to provide students with 1) a meaningful and coherent program that helps them understand how a broad and liberally-based education prepares them for life and work after graduation, and 2) a clear sense of the unique value of general education at PFW. Findings from surveys conducted in Fall 2021 of students who had already completed the General Education program (61 respondents) and faculty (89 respondents) support a desire to revise the current program to achieve these goals.

- A majority of faculty who completed the survey perceived either a need for a minor modification (37.1%, n = 33) or major modification (39.3%, n = 35) of the General Education program. Very few perceived no need for modification (23.6%, n = 21).
- The majority of faculty who responded believed that general education should promote intellectual growth (71.9% strongly agree), increased breadth of knowledge/perspectives across disciplines (67.4% strongly agree), and development of academic skills such as reading, writing, and critical thinking (73.0% strongly agree). They tended to agree that General Education courses should provide intellectual breadth outside of the student's major (51.7% strongly agree) more so than foundational knowledge for coursework in a major (only 30.3% strongly agree).
- Faculty who responded tended to perceive that the current program does not sufficiently promote intellectual breadth outside of the major. Rather, they perceived the current program to be characterized by prescription by departments of specified General Education courses for their majors (mean = 62.69 on a scale of 0-100). Moreover, relatively few students who completed the survey reported that General Education courses expanded their understanding of multiple disciplinary perspectives (19.7% Strongly

agree), which may reflect lack of understanding of the meaning of "disciplinary perspectives" or lack of awareness of multiple perspectives across General Education courses. (It is important to note that these were students who had completed their general education requirements.)

- Faculty who responded tended to agree that General Education goals and standards should be clear to students (58.4% Strongly agree). They had a relatively low perception of the coherence of the current program (mean = 40.07 on a scale of 0-100) and of students' understanding of goals of the current program (mean = 30.38 on a scale of 0-100). They also tended to see the current program as having complicated requirements (mean = 55.26 on a scale of 0-100). Students who responded (and who had completed the program) tended to view General Education as a set of requirements to check off (52.5% Strongly agree).

- Faculty who completed the survey tended to agree that General Education should foster an atmosphere of inquiry where diverse backgrounds and perspectives are valued (69.7% Strongly agree). Diversity in this broader sense (backgrounds, perspectives) was more widely supported by faculty than singular emphases on diversity, equity, and inclusion (42.7% Strongly agree), global perspectives (38.2% Strongly agree), or interdisciplinary perspectives (28.1% Strongly agree). Relatively few students who responded (and had completed the program) perceived that General Education courses have helped them understand societal issues (41.0% Strongly agree).

The proposed revision would:

- Provide a purposeful framing of general education at PFW that makes the goals, value, and relevance of the program clear to students.
- Reduce the total number of required credits from 33 in the current program to the state-mandated minimum of 30 credits.
- Retain the current requirement for a minimum of 3 credits in each of Foundational Skills requirements.
- Require a minimum of 3 credits in the following four Ways of Knowing categories: Scientific, Behavioral/Social Scientific, Humanistic, and Artistic categories. The Humanistic and Artistic categories replace the current Humanistic/Artistic and Creative/Interdisciplinary categories to ensure exposure to the arts (it is possible to complete the current program without having taken a course in the arts). PFW stands out among the other Purdue campuses in that we have a College of Visual and Performing Arts with a rich set of course offerings in the fine arts that do not exist otherwise in the Purdue system. Part of the PFW experience of a well-rounded general education for all students should include an opportunity to be exposed to that component of our campus.
- Embrace values that support diversity, equity, inclusion (DEI), and global awareness, as called for in the PFW strategic plan, by adding a new requirement to take at least one course flagged as having a focus on DEI and/or global issues.
- Retain the flexibility of allowing student choice in the required 9 additional credits from Foundational and Ways of Knowing categories.

- Eliminate the current Capstone category, in which some courses are major-specific and do not serve as a true capstone that integrates across areas of general education.
- Give students a sense of ownership and meaning in their path through general education by creating suggested clusters of courses centered around themes that appeal to different interests.
- Require that Ways of Knowing courses have no prerequisites other than Foundational Skills courses to ensure that all general education courses are accessible to students early in their college careers to students from across majors.
- Provide a more systematic way to assess learning outcomes across the program.

Program Structure

A. Foundational Intellectual Skills

1. Written Communication – 3 credits minimum
2. Speaking and Listening – 3 credits minimum
3. Quantitative Reasoning – 3 credits minimum

- Foundational Intellectual Skills courses must meet all state learning outcomes in either written communication, speaking and listening, or quantitative reasoning.
- Each course in this category cannot have any prerequisite coursework other than placement testing or one of the other Foundational Skills courses.
- Departments that have courses that can be placed into at a higher level than current Foundational Skills courses are encouraged to apply for inclusion of those courses in Foundational Skills so that students do not take the associated lower-level courses under the mistaken assumption that only the lower-level courses fulfill the requirement.
- These courses should be offered at least once a semester so that students have adequate access to them early in their program of study.

B. Ways of Knowing

1. Scientific Ways of Knowing, as defined by state learning outcomes – 3 credits minimum
2. Social and Behavioral Ways of Knowing, as defined by state learning outcomes – 3 credits minimum
3. Humanistic Ways of Knowing, as defined by the following adaptations of state learning outcomes for "Humanistic and Artistic" category. Courses in this category should be from the humanistic disciplines in the College of Liberal Arts – 3 credits minimum

   6.1 Recognize and describe humanistic or historical works or problems and patterns of the human experience.

   6.2 Apply disciplinary methodologies, epistemologies, and traditions of the humanities, including the ability to distinguish primary and secondary

sources.
6.3 Analyze and evaluate texts, objects, events, or ideas in their cultural, intellectual, or historical contexts.
6.4 Analyze the concepts and principles of various types of humanistic expression.
6.5 Create, interpret, reinterpret, or critique humanistic works.
6.6 Develop arguments about forms of human agency or expression grounded in rational analysis and in an understanding of and respect for spatial, temporal, or cultural contexts.
6.7 Analyze diverse narratives and evidence in order to explore the complexity of human experience across space and time.

4. Artistic Ways of Knowing (includes arts appreciation and creative courses), as defined by the following adaptations of state learning outcomes for "Humanistic and Artistic" category. Courses in this category should be from the College of Visual and Performing Arts – 3 credits minimum
   6.1 Recognize and describe artistic works.
   6.2 Apply disciplinary methodologies, epistemologies, and traditions of the visual and performative arts.
   6.3 Analyze and evaluate artistic works in their cultural, intellectual, or historical contexts.
   6.4 Analyze the concepts and principles of various types of artistic expression.
   6.5 Create, interpret, or reinterpret artistic works through performance or criticism.
   6.6 Develop arguments about forms of human agency or expression grounded in rational analysis and in an understanding of and respect for spatial, temporal, or cultural contexts.
   6.7 Analyze diverse artistic expressions in order to explore the complexity of human experience across space and time.

- Ways of Knowing courses must meet all learning outcomes for their category.
- Ways of Knowing courses cannot have any prerequisites other than Foundational Skills courses.
- Ways of Knowing courses must be taught on a regular cycle, ideally once a year. Courses that are offered less frequently cannot assess learning outcomes on a regular basis, as detailed in the section on Course Assessment and Program Review.

C. <u>Diversity, Equity, Inclusion and/or Global Awareness Requirement</u>

Requirement to take at least one Ways of Knowing course used to satisfy General Education requirements that is designated as having a focus on diversity, equity, inclusion, and/or global awareness.

Courses designated as having a focus on diversity, equity, inclusion, and/or global

awareness must meet one or both of the following learning goals:

i. Develop students' understanding of and appreciation for a) diversity - the ways that differences among individuals and groups of people (e.g., race, ethnicity, gender, sexuality, class, age, nationality, disability, culture, religion) shape lived experiences and perspectives; and/or, b) inclusion - how deliberate attention to diversity creates a community where all members are respected, feel a sense of belonging, and feel that differences are valued; and/or c) equity - how a commitment to addressing inequalities for the purpose of achieving fairness and justice is a prerequisite for equal opportunity.

ii. Develop students' understanding of and appreciation for how social, cultural, political, economic, and/or technological processes in societies outside the United States, present or past, or in North America before the arrival of Europeans, shape (or shaped) the human experience in those societies; and/or how globalization processes impact the United States or societies more broadly.

- Discrete learning outcomes for courses designated as DEI/Global Awareness will be developed based on the above learning goals.

D. Nine Additional Credits

Nine additional credits from any Ways of Knowing or Foundational Skills category.

E. Thematic Clusters

Thematic clusters provide students a mechanism to connect general education courses around a common theme. The purpose of the clusters is to give students the sense of coherence and meaning to general education coursework that is perceived to be lacking in the current program. To be listed in a thematic cluster, a course need not be wholly focused on the theme in question but should meaningfully engage with the theme in such a way that students will come away knowing more about matters related to the theme than they did going into the course.

- Courses within Ways of Knowing categories will be organized and presented to students in specific thematic clusters. Clusters will be displayed graphically on the General Education website as pathways or maps through the program.

- Thematic clusters should include courses from at least three Ways of Knowing categories. Each of the courses in a cluster are required to meet all learning outcomes for their categories but a cluster need not comprise courses from all categories. Therefore, a cluster need not satisfy all learning outcomes of the whole General Education program.

- It is not required that Ways of Knowing courses belong to a cluster. Also, a given course may be listed in more than one cluster.

- Students will not be required to select courses in a thematic cluster but rather should be encouraged to do so as a way to take ownership of their individual path through their general education coursework. Completion of a thematic cluster could be tracked through an app (e.g., Suitable) with administrative support for entering data in the app. Students could be encouraged to list completion of a thematic cluster on their resumes. A LinkedIn badge could also be developed to recognize completion of a cluster.

- A full, robust, and meaningful list of thematic clusters will be accomplished through input from all faculty members who are interested in providing their ideas (e.g., through Town Halls). The General Education Subcommittee will then approve the addition of thematic clusters for the following catalog year. A mechanism will be provided for courses to be approved by the committee for inclusion in a new or existing cluster at the same time as the call for new course proposals. The committee will also determine whether any clusters should be retired at the time of General Education program review. It is expected that thematic clusters will remain largely stable from year to year.

Thematic clusters may involve broad issues considered from multiple disciplinary approaches, or skills and experiences acquired across fields. The following ideas are meant as examples of thematic clusters:

- Expressions of the Human Experience - How have humans endeavored to conceptualize, understand, navigate, and express their humanity across time and place? What does it mean, and what has it meant, to be human?

- Technology and Digital Skills – How can technology and digital skills be used to facilitate communication, pursue knowledge, and enhance productivity of individuals and organizations?

- Global Visions - How might a global view of human affairs—past, present, and future—serve to shape, clarify, or sharpen how we understand both ourselves and others? What has, does, and might it mean to view the world, and the place of human beings within it, from a global perspective?

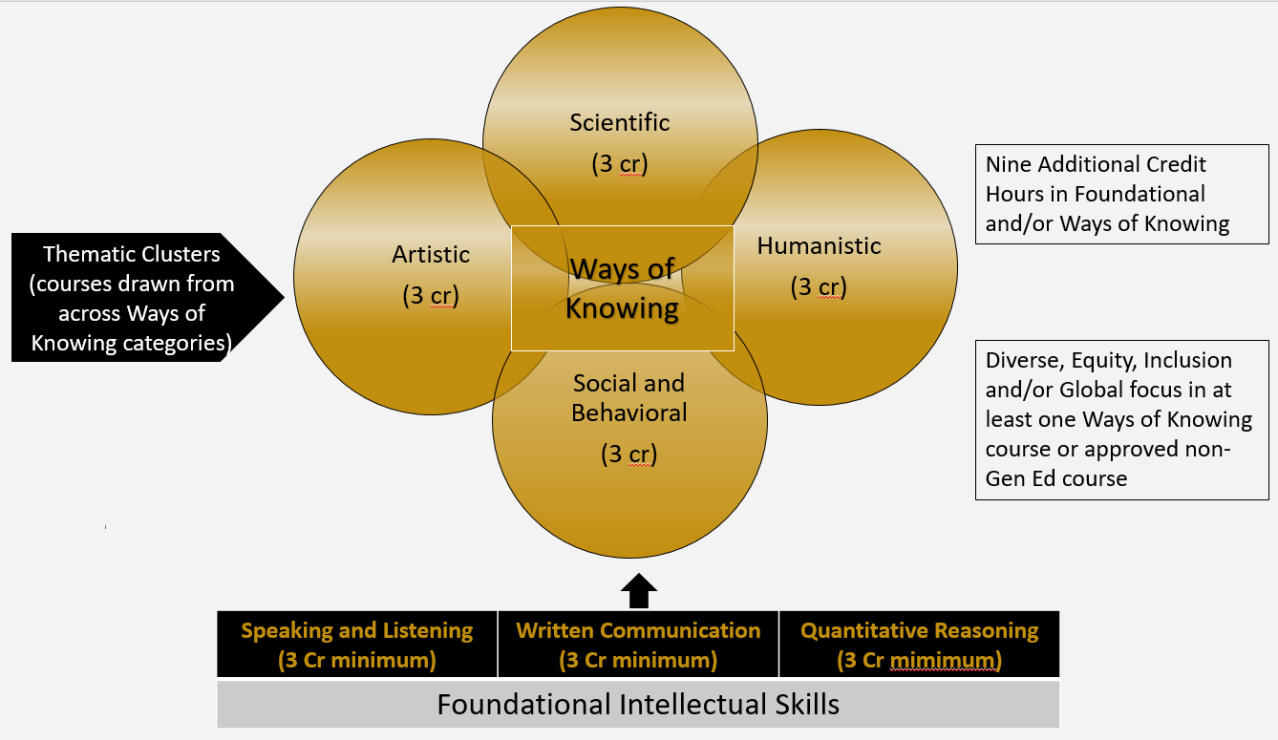
- Humans and the Physical Environment - How do humans interpret, interact with, and impact the environment? How can these interactions be used to promote environmental sustainability?

- Intercultural Understanding - What does it take for people from different places and backgrounds to effectively understand and engage with one another? How might people from different or diverse backgrounds best work together to solve common problems?

- Self and Society - How, why, and to what ends have human beings created systems, structures, and other mechanisms to organize, manage, and better their world? Do the solutions of the past adequately address the problems of today,

and those of the present the challenges of tomorrow?

Overview of Proposed Program



	Current Credits	Proposed Credits
Foundational Intellectual Skills		
Written Communication	3 (minimum)	3 (minimum)
Oral communication	3 (minimum)	3 (minimum)
Quantitative Reasoning	3 (minimum)	3 (minimum)
Ways of Knowing		
Scientific	3 (minimum)	3 (minimum)
Social and Behavioral	3 (minimum)	3 (minimum)
Humanistic and Artistic	3 (minimum)	
Humanistic		3 (minimum)
Artistic		3 (minimum)
Interdisciplinary or Creative	3 (minimum)	
Additional Foundational Skills and/or Ways of Knowing	9	9
Diverse, Equity, Inclusion and/or Global focus in at least one Way of Knowing course		0 (required)
Capstone	3	
Total	33	30

Framing of General Education

The purpose of the General Education program at PFW will be made clear to students through a framing such as the following:

> General Education at PFW offers you the opportunity to tailor your path with courses outside of your major that will excite your interests and enable you to make meaningful contributions to the world around you. It complements the in-depth knowledge and skills in your chosen field that you will attain through your major. Your general education experience will give you the

foundation in broad intellectual skills and different ways of knowing that will continue to have relevance and meaning in your life long after you have graduated. General Education courses will guide you to:

- Think Creatively
- Communicate Effectively
- Reason Scientifically
- Understand the Human Experience
- Appreciate Artistic Expression
- Embrace Multiculturality
- Adopt Global Perspectives

Course Assessment and Program Review

Assessment of General Education courses currently involves a nonsystematic sampling of learning objectives based on assessment plans of individual degree programs. To improve program-wide assessment of General Education:

- All courses in each General Education category will cycle through a subset of the learning outcomes for the category every three years, such that all courses will assess the same outcomes in a given year. Faculty will assess the contributions of their courses to the General Education program using measures related to their courses. To simplify and standardize assessment, current assignments designed independently by faculty across multiple courses and sections will be evaluated using common rubrics for each of the General Education categories. Rubrics will be developed by the General Education Subcommittee with input from the larger faculty. This method will allow for both a more systematic examination of outcomes across the program and instructor flexibility in choice of appropriate assessment measures.
- A review of the General Education program will be undertaken every three years to ensure program sustainability. This review will include analyses of data such as term, number of sections, instructional modality of sections, enrollment cap, enrollment at census, number of grades >= C-, number of D and F grades, and number and dates of Withdrawals. Analyses of these data will allow for deans and department chairs to coordinate offerings to meet student demand.

Regulations

- To ensure a well-rounded education, students shall not take more than three courses from the same prefix across the General Education program, including both Foundational Skills and Ways of Knowing courses.
- As in the current program, a student must earn a grade of C- or better in each course used to satisfy General Education requirements.
- A course can be included in only one category of the General Education program but it may appear in more than one of the listed thematic clusters.
- Consistent with the goals of providing breadth of education and fostering student ownership of general education, a major should not require that students take a specified

general education course to fulfill a specific general education requirement. Moreover, the practice of specifying which General Education courses a student must take is in violation of the state regulation that transfer students who have been certified as completing general education requirements cannot be required to take additional general education courses. A given course may be used to fulfill both sets of requirements and students can be advised to take given courses for both purposes (to the extent that "double-dipping" is allowed by their department or college) but an academic plan cannot specify the courses students must take to fulfill General Education requirements. The VCAA or designee will monitor academic plans to ensure that they do not specify which General Education courses must be taken.

- To facilitate completion of general education at PFW for transfer students (if they have not yet completed the state requirements), transferred credits from courses equivalent to PFW courses will count as fulfilling the same General Education requirements. Transfer students who have not completed the state-mandated General Education requirements at their previous institution will have to meet the requirements of the General Education program at PFW.

Course Reapplication and Approval Process

Courses in the current Foundational Intellectual Skills category that meet the prerequisite and other requirements in the proposed program will remain in Foundational Skills in the revised General Education program without the need for application. Courses that do not meet the prerequisite and other requirements will be removed. Courses in current Ways of Knowing categories will need to submit a brief application for review by the General Education Subcommittee by early fall, 2024 in order to be listed in the revised program in the 2025–26 Catalog. Applications for variable title courses should list all variations of the course that will meet the stated set of learning outcomes. The application will ask for the intended Way of Knowing category, confirmation that the course has no prerequisites other than currently approved foundational skills courses, assurance that the course fulfills all of the learning outcomes for its area, whether the course is appropriate for inclusion in one of the proposed thematic clusters, and, if applicable, a brief explanation of how the course fulfills the criteria to be flagged as a DEI and/or Global Awareness course. In addition, if the course has not been offered on a regular cycle in the past three academic years, the General Education Subcommittee will ask for a brief explanation of how ongoing offerings could be regularized to at least once per academic year. Course syllabi will also be collected, but syllabi for current Ways of Knowing courses will not be reviewed and therefore do not need to be revised. If a course is being considered for inclusion in a thematic cluster, the application will ask how the theme will be addressed in the syllabus. The list of approved courses and thematic clusters will be transmitted by the committee secretary to the Registrar's Office in time for inclusion in the Catalog for the next academic year.

MEMORANDUM

TO: Fort Wayne Senate

FROM: Deborah Bauer, Wylie Sirk, Co-Chairs
Faculty Affairs Committee

DATE: 10/27/2023

SUBJ: Approval of Rubric for Sabbatical Applications

WHEREAS, In February 2022 the Fort Wayne Senate charged the Faculty Affairs Committee (FAC) with reviewing procedures used by the Professional Development Subcommittee (PDS) and the Office of Academic Affairs (OAA) for reviewing and granting faculty sabbaticals.

WHEREAS, On April 11, 2022, the Faculty Senate approved a document containing changes and updates to SD 06-14 Sabbatical leaves (attached SD 21-39).

WHEREAS, Discussion in Faculty Senate on Oct. 10, 2022 of Senate Doc 22-5 (attached) revealed that certain elements of the recommended document had not be incorporated into the PDS rubric.

WHEREAS, Faculty Affairs Committee requested to PDS that the changes be incorporated and updated by March 3, 2023.

WHEREAS, PDS sent FAC two documents, a revised Sabbatical Application Review Procedures and PDS Sabbatical Evaluation Form Rubric on February 28, 2023 (attached).

WHEREAS, FAC approved the revised PDS Sabbatical Evaluation Form Rubric in a meeting on March 13, 2023.

BE IT RESOLVED, that the Fort Wayne Senate approve the changes to the PDS Sabbatical Evaluation Form Rubric for evaluating sabbatical applications.

Approved	**Opposed**	**Abstention**	**Absent**	**Non-Voting**
Deborah Bauer				Kimberly O'Connor
Hui Hanke				
Jay Johns				
Mark Jordan				
Promothes Saha				
Wylie Sirk				

MEMORANDUM

TO: Senate Faculty Affairs Committee
FROM: Professional Development Subcommittee
S. Ding; R. Cousik; S. Johnson; A. Khalifa; S. LeBlanc; J. Li; S. Rumsey (chair)
CC: C. Drummond; J. Meyers (OAA)
DATE: February 28, 2023
RE: Revised Sabbatical Application Review Procedures

As requested, the PDS has updated its sabbatical application review procedures in the following ways:

1. Revised language of scoring rubric to more carefully explain components of the 5-page narrative, including:
    a. Goals and significance of the project, which must include scholarly references
    b. Methods, procedures, or creative approach to be applied
    c. A plan of work for how applicant will use their sabbatical leave
    d. Expected outcomes that will measure success
    e. A description of how the project will enhance applicant's professional development.
2. Revised language of scoring rubric to more carefully explain how applicants must demonstrate scholarly productivity since the time of hire for first sabbaticals or since the last sabbatical for second and subsequent sabbaticals, with emphasis placed on accomplishments during the immediately preceding past 5 years. If the applicant deems significant service, administration, or teaching overload have impacted their productivity it is their responsibility to fully describe those activities and their impact.
3. Revised language of scoring rubric to require letters of support from department/unit committee, chair/dean, and any outside collaborators.
4. Revised rubric scoring methods.

In addition, the PDS has made recommendations to the Office of Academic Affairs to update their PFW Sabbatical Procedures document in the following ways:

1. Change required narrative components to mirror those listed in 1a. to 1e. above.
2. Remove the length limit to CVs so that faculty are more easily able to demonstrate scholarly productivity.
3. Require a letter of support from the chair/director that demonstrates support for the significance of the applicant's proposed sabbatical project, evidence of ongoing scholarly work, and how this project differs or builds upon past sabbaticals. Absence of such a letter will result in a denial of the application.
4. Require a letter of support from the relevant departmental or division faculty committee that has reviewed the application. This letter should address the significance of the applicant's proposed sabbatical project, evidence of ongoing scholarly work, and how this project differs or builds upon past sabbaticals. Absence of such a letter will potentially negatively impact the success of the application.
5. Include language that indicates that the final decision for awarding sabbaticals is that of the Vice Chancellor of Academic Affairs. Further, denied applications will be given clear and

individualized explanations for the rejection of their applications. The decision process is strictly the responsibility of the Vice Chancellor and the Office of Academic Affairs, not the Professional Development Subcommittee.

PDS Sabbatical Leave Application Evaluation Form

Faculty name: Proposal title:

Department: Previous sabbatical leave (report provided):

Rank:

As stated in Senate Document SD 06-14 (amended in SD 21-39) the criteria below are required as part of the sabbatical application. All scores are on a 0 – 5 point scale with 0 being unsatisfactory and 5 being excellent.

1. A statement of goals for the sabbatical project that demonstrate its significance. The applicant must clearly document their research goals and the significance of the project for their proposed sabbatical leave. Position the project in relation to relevant scholarly literature. Members of the PDS are scholars from many fields, but not necessarily well versed in the applicant's discipline. The applicant should use language that is easily understandable by readers who are not experts in the applicant's discipline and define discipline-specific terminology when necessary. Letters of support from chair/dean and unit committee endorsing the project will also factor into this portion of the evaluation.	Score:
2. A statement of the methods, procedures, and/or creative approach that will be employed for the sabbatical project. The applicant must provide a clear description of methods, procedures, and/or creative approach they will use in their research project during their proposed sabbatical leave. Again, the applicant should use language that is easily understandable by readers who are not experts in the applicant's discipline. If applicable, letters from IRB, collaborators, or funding sources will also factor into this portion of the evaluation.	Score:
3. A plan of work that accounts for how the applicant will use their time during the sabbatical period. The applicant must clearly state how they will use their time during the sabbatical leave. This can be a timeline or plan of action.	Score:
4. A statement of expected outcomes from the sabbatical project or how you will measure the success of your sabbatical leave. The applicant must provide a clear rationale for the project's success. Examples include expected publications, grants, applications in the classroom, exhibits or performances, or community engagement activities.	Score:
5. A statement describing the impact of the sabbatical on reinvigorating or advancing the applicant's professional development and the university's goals. The applicant must clearly explain how the proposed project fits in their overall program of scholarship and supports their professional growth and university/department/program goals.	Score:
6. A statement that discusses the applicant's scholarly productivity in recent years The applicant must clearly explain their ongoing scholarly work (publications, conference presentations, creative endeavor production, grants etc.) since the time of hire for first sabbaticals or since the last sabbatical for second and subsequent sabbaticals, with emphasis placed on accomplishments during the immediately preceding past 5 years. In cases where significant service, administrative, and/or teaching overload has markedly affected research output within the five years, faculty should provide a statement explaining the specific impact of these activities and their outcomes. The evidence of productivity should be reflected in the CV and in letters of support from chair/dean and unit committee. Report(s) from previous sabbatical(s) also factor into this portion of the evaluation.	Score:
ADDITIONAL COMMENTS:	Total: ___/30

Senate Document SD 21-39
Approved, 4/11/2022

MEMORANDUM

TO: Fort Wayne Senate

FROM: Faculty Affairs Committee

DATE: March 28, 2022

SUBJECT: Approval of Changes/Updates to SD 06-14: Sabbatical Leaves

WHEREAS, there has been confusion regarding procedures in evaluating applications for sabbatical leaves,

WHEREAS, a number of faculty applications for sabbatical leaves in the Fall 2021 semester have been denied despite providing necessary documentation as evidence warranting for granting of leaves,

WHEREAS, decisions to decline sabbatical leaves were issued regardless of the denied faculty applications having demonstrably met the requirements and protocols established by their respective departments and SD 06-14: Sabbatical Leaves,

WHEREAS, the Faculty Affairs Committee (FAC) was charged with submitting a report (included below) on sabbatical review procedures by Office of Academic Affairs and the Professional Development Committee,

WHEREAS, FAC had included recommendations and/or policy revisions to the Executive Committee by the March 25, 2022, document deadline so that any updated policies can be implemented in fall of 2022.

BE IT RESOLVED, that the Senate approve the updated SD 06-14 that further clarifies and establishes the appropriate process of evaluating cases submitted for sabbatical leave as follows:

Senate Document SD 06-14
(Supersedes SD 88-27)
(Amended and Approved, 4/9/2007)

SABBATICAL LEAVES

PFW's mission includes the search for new knowledge, excellent teaching, and service to the university, profession, and community. In order to maintain and continue the high level of academic excellence necessary to support this mission, it is important for the faculty to periodically update and strengthen their professional skills. A sound program of sabbatical leaves is thus of vital importance to the University in that it provides for this continued professional growth and new or renewed intellectual achievement through significant study, research, and writing that cannot easily be done while engaged in the ongoing duties of a faculty member.

A sabbatical leave is not a leave which a faculty member automatically "earns" by having been employed for a given period of time. Rather, it is an investment by the University in the expectation that the sabbatical leave will significantly enhance the faculty member's capacity to contribute to the objectives of the University. For this reason, all periods of sabbatical leave count as full-time service to the University and will be approved only if there is adequate reason to believe that they will achieve this purpose. Candidates should know that the way this belief is evaluated will be based on the presentation (via narrative, CV, and/or department support letters) of a candidate's scholarly productivity in recent years. If a candidate has devoted considerable time to service, teaching-related work, or other activity at the expense of research productivity, they should plan to explain this.

A statement of goals for the sabbatical, an outline of the type of evidence that will be used to demonstrate how those goals will be achieved, and a statement of the proposed use of the applicant's time during the sabbatical period are required as part of the sabbatical application. Acceptable programs for the use of time may include:

1. Research on significant issues and problems, including pedagogical issues.
2. Important creative or descriptive work in any means of expression, for example, writing, painting, and so forth.
3. Retraining in new domains of scholarship or creative endeavor in one's discipline. Such retraining may be used to enhance one's scholarship and/or one's teaching capabilities.

Before being evaluated by the Professional Development Subcommittee, applications for sabbatical leave must have been reviewed to ensure that the applications meet the guidelines specified in this document by appropriate administrators (chair/dean or director). A departmental or division faculty committee (e.g., the Promotion and Tenure or Personnel

Committee) must make a written recommendation about sabbatical applications to the appropriate administrator at that level, which must factor into PDS' evaluation process. The administrator will forward this recommendation along with his or her own recommendation to the next level.

The Professional Development Subcommittee is responsible for recommendations to the Vice Chancellor for Academic Affairs regarding sabbatical leave applications. Professional Development Subcommittee should follow only this document and department criteria in evaluating sabbatical applications. PDS operates as an independent faculty committee. The Vice Chancellor for Academic Affairs makes final decisions regarding sabbatical leave applications. Process questions should be brought to Faculty Affairs Committee for guidance. Denied applications should be given clear and individualized explanations for the rejection of their applications with an opportunity to respond.

At the termination of the leave, and not later than three months after returning to campus, the faculty member must submit a report about the sabbatical leave to the department chair or program director to whom they report. The Chair forwards the report to the next level, usually the Dean or Director, who forwards the report to the Office of Academic Affairs. This report must outline how the sabbatical period was used, what outcomes were achieved, and indicate further outcomes that are expected as a result of the sabbatical project. All such reports must be included with subsequent sabbatical applications. Information about the outcome of previous sabbaticals will be used to evaluate subsequent sabbatical applications.

(Note: Per Senate Document SD 06-19, each department or division should establish specific criteria for the granting of sabbatical leaves that will serve as the basis of evaluation for applications coming from that department or division, and that are consistent with the above guidelines.)

Faculty Affairs Committee
Report on Sabbatical Review Procedures

In February 2022, Senate charged the Faculty Affairs Committee to undertake

- a review of the ***role*** that ***Office of Academic Affairs*** procedures or lack of procedures played in the way PDS carried out its review of sabbatical applications in Fall 2021;
- a review of the ***way PDS*** carried out its review of sabbatical applications in Fall 2021;

Senate charged the Faculty Affairs Committee to

- make appropriate revisions to SD 06-14, such as
    - clarifying the role of the VCAA
    - clarifying the role of PDS
    - clarifying the process for determining criteria for evaluation
    - determining whether department criteria still have primacy, and
    - any other matters that will prevent any confusion and therefore unnecessary stress for faculty in the future;

Senate charged FAC to

- submit its recommendations and/or policy revisions to the Executive Committee by the March 25, 2022 document deadline so that any updated policies can be implemented in fall of 2022.

In view of the charge, Senate FAC conducted interviews (VCAA, PDS Chair, others) and found the following for which we make recommendations.

Finding 1: PDS Chair mentioned that in the past, the Subcommittee did not use rubrics. In 2021, PDS developed and adopted rubrics for evaluating sabbatical applications. The rubrics apply varying weights to different evaluation items with the heaviest weight on recent publications.
Recommendations: As PDS starts adopting specific rubrics for evaluating sabbatical applications, it will be beneficial to make the rubrics, specifically the evaluation items, available to faculty members prior to the call for applications for sabbatical leave.
Given decisions on sabbatical applications based on the currently adopted rubrics are different than previous decisions, if rubrics will be used to take future decisions, such rubrics need to be approved by Faculty Affairs Committee and made public before applications are due.
The Senate Document and/or OAA guidelines need to inform candidates that productivity for the last 5 (or possibly fewer) years is a major consideration for those reviewing sabbatical applications, and as such, they should be clear that this information is included in CVs and/or candidate narratives.

Finding 2: While the pre-existing processes for evaluating sabbatical application proposals did not include rubrics, in Fall 2021 PDS decided to adopt a similar process to that used for evaluating Summer Faculty Grant proposals. One of the points the PDS Chair mentioned was that, in light of the rubric used to evaluate sabbatical application proposals in Fall 2021, there were unsatisfactory proposals due to lack of or inadequate literature review.
Recommendations: For Summer Faculty Grants, applicants are allowed to request one or two previous successful proposals for review. As PDS uses the same process for evaluating both types

of proposals, we recommend that approved sabbatical proposals be made available for review by candidates. This will be consistent with the process of Summer Faculty Grants. In addition, it will help faculty members construct their sabbatical proposals of better quality and have a better success with their applications.

Finding 3: Senate FAC found that PDS considered themselves to have been put in a position of pressure from upper administration to limit the number of applications approved. The VCAA noted in an interview that staffing and cost of staffing at the university are a prime concern for his office and therefore sought to be extra diligent in decisions regarding how university money is spent. This diligence, it seems, may have resulted in the pressure felt by the members of the PD subcommittee.
Recommendations: PFW documents should reflect what faculty believe to be a proper relationship of communication between VCAA and PDS for sabbatical applications. VCAA's office should not do anything that gives members of PDS the impression that certain findings are expected from them. Anything otherwise dilutes the important role of shared faculty governance and decision-making on the campus.

Finding 4: Candidates denied sabbatical for the 2021 application cycle were not offered a clear and personalized explanation for the rejection of their applications. This has the potential to inflict stress, anxiety, and breed self-doubt in our own colleagues. Especially given our findings of the changed process for evaluating sabbaticals this year, this discovery is particularly concerning for the strain likely put on faculty whose applications were rejected.
Recommendations: The Senate or OAA documents need to include some language that requires either PDS or VCAA or both to offer faculty whose applications were not approved a clear and fair explanation for this decision.

Finding 5: Expectations for what belonged in the candidate's proposal were not clearly indicated in the relevant Senate and OAA documents. Examples of discrepancies include: no specific request for literature review in application, yet some PDS members were looking for it; emphasis on CV should show productivity in last five years; requests for specificity in what and where faculty aimed to publish after the fact.
Recommendations: Expand language in Senate or OAA documents to reflect these requests. Moreover, the language should include a grandfather clause to allow time for faculty to accommodate the new criteria on publications.

Finding 6: The Committee found an almost total neglect of Department or College criteria and recommendations in the decision-making process when it came to evaluating applications. Whereas candidates are asked to make sure their application adheres to department criteria, these criteria are no longer relevant once the dossier reaches PDS. Similarly, department members give time and energy to sitting on review committees and reviewing the sabbatical proposals, while recommendations of committees, chairs, and deans, seem not to factor into the rubric for evaluating faculty applications at all.

Recommendations: Senate document should be revised to require that PDS and/or VCAA take into consideration the recommendations and opinions of department and college faculty when evaluating the potential sabbatical.

Finding 7: Senate committees are sometimes not aware of the relevant Senate Documents that should be used to guide their work.
Recommendation: All Senate committees should be given information regarding their role, responsibilities, and relevant Senate documents to fulfill their charge.

Senate Document SD 22-5
Amended and Approved, 10/10/2022

MEMORANDUM OF RESOLUTION

TO: Fort Wayne Senate

FROM: A. Nasr, Chair
Executive Committee

DATE: October 3, 2022

SUBJ: Review of Sabbatical Application Rubric Developed by PDS for 2022-2023

Whereas, due to irregularities with the way that sabbatical applications were reviewed during the 2021-2022 academic year, Senate EC asked Senate FAC to review the process and make recommendations for improvement (SD 21-15);

Whereas, Senate FAC made recommendations to improve the process (SD 21-39) and that document was unanimously approved by Senate at the April 2022 meeting;

Whereas, it was the hope of the Senate EC that the review process itself and the guidance from FAC would help PDS develop a fair rubric to evaluate sabbatical applications, given the important role that sabbaticals play in the professional life of faculty, especially faculty with additional responsibilities that make it difficult for them to consistently dedicate time for research;

Whereas, PDS came up with a rubric and announced it on September 20th, while deadline for sabbatical applications to PDS was set for October 7, with earlier deadlines set by departments to ensure that the applications were able to be reviewed by department committees, chairs, and deans;

Whereas, the rubric PDS developed does not align with SD 21-39;

Whereas, for example, the rubric includes the following section:

Evidence of "Scholarly Productivity in Recent Years"
Senate Document SD 06-14 states: "A sabbatical leave is not a leave which a faculty member automatically earns by having been employed for a given period of time. Rather, it is an investment by the University in the expectation that the sabbatical leave will significantly enhance the faculty member's capacity to contribute to the objectives of the University. For this reason, all periods of sabbatical leave count as full-time service to the University and will be approved only if there is adequate reason to believe that they will achieve this purpose. Candidates should know that the way this belief is evaluated will be based on the presentation (via narrative, CV, and/or department support letters) of a candidate's scholarly productivity in recent years."

Whereas, the rubric ends its long quotation before the sentence in 21-39 that quite significantly alters the meaning and emphasis of this paragraph, namely “If a candidate has devoted considerable time to service, teaching-related work, or other activity at the expense of research productivity, they should plan to explain this.”

BE IT RESOLVED, that PDS goes back and reviews its rubric, revising it again to align with both the letter and spirit of SD 21-39;

BE IT FURTHER RESOLVED, that PDS takes particular care in making sure they properly quote and cite sentences and paragraphs from relevant Senate documents, governing the sabbatical review process;

BE IT FURTHER RESOLVED, that PDS reports the results of its recommendations to Senate EC (including information on total number of applications, total number of positive and negative recommendations; and confirmation that anyone who may receive a negative recommendation from PDS received detailed and timely feedback on their application by January 2023.

Senate Document SD 23-8

MEMORANDUM

TO: Fort Wayne Senate

FROM: Steven A. Hanke, Chair of the Education Policy Committee

DATE: 11/15/2023

SUBJ: Updates to Countries Exempt from English Proficiency for Undergraduate Applications

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WHEREAS, the Educational Policy Committee (EPC) is the parent committee of the International Education Advisory Subcommittee; and

WHEREAS, the International Education Advisory Subcommittee requested that EPC review a resolution to update the countries exempt from English Proficiency for Undergraduate Applications; and

WHEREAS, EPC completed the review and voted in support of the document going forward;

BE IT RESOLVED, That the attached resolution be considered by the Senate.

Approved	**Opposed**	**Abstention**	**Absent**	**Non-Voting**
Stephen Buttes				Chris Huang
Patricia Eber				Teri Swim
Steven Hanke				
Andres Montenegro				
Erik Ohlander				
Promothes Saha				

Senate Document SD 23-8

MEMORANDUM

TO: Steven Hanke
Chair, Educational Policy Committee

FROM: Assem Nasr
Chair, International Education Advisory Subcommittee

DATE: October 30, 2023

SUBJECT: Updates to Countries Exempt from English Proficiency for Undergraduate Applications

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WHEREAS, the International Education Advisory Subcommittee (IEAS) is a subcommittee of the Educational Policy Committee (EPC);

WHEREAS, Purdue University - West Lafayette (PU) has established a list of countries from which applicants are exempt from supplying evidence of proficiency in English;

WHEREAS, in maintaining consistency with PU's application waivers for countries where English is an official language;

WHEREAS, streamlining application requirements is necessary to avoid conflicting standards in waiving English language requirements between undergraduate and graduate applicants to PFW, and inline with PU's general admissions regulations for international applications,

BE IT RESOLVED, that the following be added to the list of countries exempt from proof of English language proficiency for PFW's undergraduate international applicants.

Botswana	Nigeria	Tanzania
Christmas Island	Norfolk Island	The Gambia
Cook Islands	Philippines	Uganda
Ghana	Pitcairn Islands	Zambia
Kenya	Saint Helena	Zimbabwe
Lesotho	Sierra Leone	South Africa
Liberia	Singapore	South Sudan
Malawi	Swaziland	

Approve	**Object**	**Abstain**	**Non-voting**
Nurgul Aitalieva			John Jensen
Adolfo Coronado			Maureen Linvill
Cheu-jey Lee			Ryan Meriweather
Assem Nasr			
Mieko Yamada			

Senate Document SD 23-9

MEMORANDUM

TO: Fort Wayne Senate

FROM: Steven A. Hanke, Chair of the Education Policy Committee

DATE: 11/14/2023

SUBJ: Responding to Concerns from Campus Climate Survey: Deadnaming

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WHEREAS, the Educational Policy Committee (EPC) is the parent committee of the Senate Advising Subcommittee; and

WHEREAS, the Senate Advising Subcommittee requested that EPC review a resolution to respond to concerns from the Campus Climate Survey regarding "Deadnaming"; and

WHEREAS, EPC completed the review and voted in support of the document going forward;

BE IT RESOLVED, That the attached resolution be considered by the Senate.

Approved	**Opposed**	**Abstention**	**Absent**	**Non-Voting**
Stephen Buttes				Chris Huang
Patricia Eber				Teri Swim
Steven Hanke				
Andres Montenegro				
Erik Ohlander				
Promothes Saha				

MEMORANDUM

TO: Steven Hanke, Chair
Educational Policy Committee

FROM: Ann Livschiz, Chair
Senate Advising Subcommittee

DATE: 3 November 2023

SUBJECT: Responding to Concerns from Campus Climate Survey: "Deadnaming"

Whereas, Diversity, Equity, and Inclusion are one of PFW's stated strategic goals;

Whereas, PFW's diversity commitment statement states that

> "Each member of the department/school is committed to working to build and sustain an equitable and inclusive work environment where cultural diversity is celebrated and valued. We believe diversity benefits and enriches the development of all of our students, staff, and faculty in our department."

And

> "Diversity is a core value at Purdue University Fort Wayne and in the Office of Diversity, Equity, and Inclusion. We are passionate about building and sustaining an inclusive and equitable working and learning environment for all students, staff, and faculty. We believe every member on our team enriches our diversity by exposing us to a broad range of ways to understand and engage with the world, identify challenges, and to discover, design and deliver solutions."

Whereas, PFW defines inclusion as "A welcoming culture in which differences are celebrated and everyone is valued, respected, and able to reach their full potential,"

Whereas, PFW has a statement about civility, which states that

> "Prominent among the values that define the academic community is civility, which includes mutual respect, fairness, and politeness. Membership in any community requires a concern for the common good for all who belong to that community. Each individual may possess different ideas, as well as different ways of communicating those ideas, particularly in a community as varied and diverse as a university. Because of these differences, respect and civility are integral to maintaining the quality of the academic environment and free inquiry. Respect and civility should therefore be afforded to all individuals regardless of race, ethnicity, gender, age, sexual orientation, disability, religion, family status, socioeconomic level, educational background, veteran status, or position at the university."

Whereas, during the discussions of the results of campus climate survey, deadnaming of students by instructors in class was identified as a significant student concern;

Whereas, “deadnaming” refers to incidents of using the name someone was assigned at birth, rather than the name they choose to identify by in class or in writing, or using a name that the individual no longer uses;

Whereas, the practice of “deadnaming” can be invalidating and traumatic, a sign of disrespect, and in some cases even dangerous as it potentially outs an individual;

Whereas, studies show that use of chosen names helps lower mental health risks;

Whereas, studies show that deadnaming can result in avoidance of certain situations, people, and places, attention to this problem and efforts to reduce deadnaming is an important retention and student success initiative;

Whereas, the university has taken important steps in reducing the risk of deadnaming by allowing students to enter preferred name in addition to legal name in the university system;

Whereas it is Purdue University policy that students (and staff and faculty) may use their preferred names on campus regardless of whether it matches their legal name;

Whereas, different interfaces and reports in the university system include students’ preferred name, or legal name, or both;

Whereas, certain reports and internal documents must include students’ legal names and thus a change to preferred names in all university documents is not possible;

Whereas, we believe that at least part of the problem of deadnaming can be attributed to faculty having access to rosters with only students’ legal names, or not realizing that different reports may give them different names;

Whereas, we want to promote an inclusive classroom environment both as respect for our students’ humanity and important recruitment and retention tool;

Whereas, a common way for faculty to access rosters is through the university system that lists students’ legal names, without them necessarily realizing that this is the case;

Whereas, Brightspace provides faculty with rosters with updated student information in them, but not all faculty are familiar with how to use Brightspace to generate usable rosters outside of Brightspace, nor do Brightspace-generated rosters include useful information like year in school or major, something that a Cognos report has;

Whereas, Office of Institutional Research has been working hard to update the reports to include students’ preferred names or ensure that the column headings on the reports specify “legal name” or “preferred name,” rather than “first name,”

Whereas, Cognos has a report that offers an easy way to ensure that faculty have a roster with preferred names, and this report can be found in the following way: *Team Content > IPFW Shared Reports > Class Rosters > Class Roster by CRN with Email and Class Roster by Subject Code with Email;*

BE IT RESOLVED, that senate votes to approve our recommendation that each department should ensure that every faculty member in a face-to-face class receives a class roster with students' preferred names before the first class meeting of the semester;

BE IT FURTHER RESOLVED, that since not all students take advantage of the option to enter preferred name into the system (for example, if they live at home and do not want their preferred name to appear on the mail that they receive), we encourage faculty to respect and honor students' requests to use their preferred names that may be transmitted to faculty through means other than the up-to-date class roster;

BE IT FURTHER RESOLVED, that we encourage academic units—departments and colleges—to discuss the importance of using the rosters with students' indicated preferred names and the importance of fostering an inclusive classroom environment, which includes using students' preferred names in the classroom setting;

BE IT FURTHER RESOLVED, that once Office of Institutional Research finishes updating current reports in COGNOS, a list of updated reports will be made available to faculty and staff, who would be encouraged to look at whether their reports are using preferred or legal names;

BE IT FURTHER RESOLVED, that faculty pay attention to students who add their classes after the first day, and if necessary, request an updated class roster from their department's administrative assistant;

BE IT FURTHER RESOLVED, that since our proposed solution only addresses the problem of faculty deadnaming due to inaccurate information, we ask the OAA to look into clarifying and promoting policies that will protect students from being deadnamed, in particular clarifying the distinction between "free speech" and commitment to an inclusive classroom environment, and making sure that students understand their rights in these situations.

Senate Document SD 23-10

MEMORANDUM

TO: Fort Wayne Senate

FROM: Steven Hanke, Chair of the Education Policy Subcommittee

DATE: 11/6/23

SUBJ: Updating Academic Regulations in Regards to Artificial Intelligence (AI)

WHEREAS, the impact of Artificial Intelligence (AI) continues to become more prevalent within most (perhaps all) academic disciplines; and

WHEREAS, PFW Academic Regulations currently do not explicitly address student usage of AI; and

WHEREAS, course instructors are in the best position to determine AI usage policies appropriate for their course; and

WHEREAS, course instructors should be responsible for clearly communicating specific course-level AI usage polices to their students; and

WHEREAS, PFW Academic Regulations should be clarified in regards to the usage of unauthorized materials being materials identified by the course instructor as unauthorized for use in their course; and

WHEREAS, PFW Academic Regulations should be clarified in regards to the procedures to be followed by instructors when there is a reasonable suspicion a student has committed an act of academic dishonesty involving AI in the course; and

WHEREAS, to avoid redundancy the procedures described in the PFW Academic Regulations and the PFW Student Code should be the same; therefore

BE IT RESOLVED that PFW Academic Regulations for Academic Honesty be updated with the changes noted on the following pages.

Approved	**Opposed**	**Non-Voting**
Stephen Buttes		Chris Huang
Patricia Eber		Terri Swim
Steven Hanke		
Andres Montenegro		
Erik Ohlander		
Promothes Saha		

Academic Regulations: Academic Honesty

4.0: Academic Honesty

4.1: Definitions -Students are expected and required to abide by the laws of the United States, the State of Indiana, and the rules and regulations of PFW. Students are expected to exercise their freedom to learn with responsibility and to respect the general conditions that maintain such freedom. PFW has developed the following general regulations concerning student conduct which safeguard the right of every individual student to exercise fully the freedom to learn without interference. Purdue University Fort Wayne (FW) may discipline a student for committing acts of academic or personal misconduct.

4.1.2: Academic Misconduct: This type of misconduct is generally defined as any act that tends to compromise the academic integrity of the University or subvert the educational process. At PFW, specific forms of academic misconduct are defined as follows:

1. Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term "academic exercise" includes all forms of work submitted for credit or hours. **The term "unauthorized materials" includes those identified by the instructor**.
2. Falsifying or fabricating any information or citation in an academic exercise.
3. Helping or attempting to help another in committing acts of academic dishonesty.
4. Submitting the work of someone else as if it were one's own by adopting or reproducing the ideas and opinions of others without acknowledgment. Such instances of plagiarism may be intentional or unintentional, and may involve isolated words, formulas, sentences, paragraphs, entire works, or other intellectual property; either copied from other published sources, or from unpublished work such as those of other students.
5. Submitting work from one course to satisfy the requirements of another course unless submission of such work is permitted by the faculty member.
6. Serving as or permitting another student to serve as a substitute (or 'ringer') in taking an exam.
7. Altering of answers or grades on a graded assignment without authorization of the faculty member.
8. Engaging in activities that unfairly place other students at a disadvantage, such as taking, hiding, or altering resource material.
9. Violating professional or ethical standards of the profession or discipline for which a student is preparing (declared major and/or minor) as adopted by the relevant academic program. The instructor must thoroughly investigate signs of academic dishonesty, take appropriate actions, and report such actions properly to prevent repeated offenses and to ensure equity.

4.2: Policy

4.2.1: Student's responsibilities. Academic honesty is expected of all students. The student is responsible for knowing how to maintain academic honesty and for abstaining from cheating, the appearance of cheating, and permitting or assisting in another's cheating.

4.2.2: Instructor's responsibilities. The instructor is responsible for fostering the intellectual honesty as well as the intellectual development of students, and should apply methods of teaching, examination, and assignments which discourage student dishonesty. ~~**If necessary,**~~ **The** instructor should explain clearly any specialized meanings of cheating and plagiarism as they apply to a specific course. **The instructor is responsible for providing students with a written course-level policy regarding the authorized/unauthorized usage of Artificial Intelligence (AI).** The instructor must thoroughly investigate signs of academic dishonesty, take appropriate actions, and report such actions properly per procedures described in Part III.A **Procedures for Academic Misconduct in the Code of Student Rights, Responsibilities and Conduct in the Catalog** to prevent repeated offenses and to ensure equity.

4.3: Procedures: **For all procedures related to Academic Misconduct, see Part III.A Procedures for Academic Misconduct in the Code of Student Rights, Responsibilities and Conduct in the Catalog**. In order to ensure that the highest standards of professional and ethical conduct are promoted and supported at Purdue University Fort Wayne (FW), academic departments should establish a written policy/statement, addressing the professional or ethical standards of their discipline, which is distributed to all students who are preparing in the discipline. Students have the responsibility to familiarize themselves with the academic department's policy/statement. (For additional information, see the Student Disciplinary Procedures Section of the Code of Students Rights, Responsibilities and Conduct in the Catalog).

~~4.3.1: Initial decision. An instructor who has evidence of cheating shall initiate the process of determining the student's guilt or innocence and the penalty, if any, to be imposed. An instructor shall make initial findings only after informing the student, during an informal conference held within ten business days of discovering the alleged cheating, of charges and evidence, and allowing the student to present a defense. The instructor may assign a grade of Incomplete to any student whose case cannot be resolved before the course grades are due in the Registrar's Office.~~

~~4.3.2: Reporting. During the period in which the student is permitted to drop or withdraw from courses, the instructor shall inform the Chair/Director promptly to place an academic hold on the student's account in order to prevent the accused student from dropping or withdrawing from the course. The instructor who makes an initial finding that academic dishonesty has been practiced shall impose an academic sanction. Then, within seven business days, the instructor shall supply a written report to the student, the chair of the student's department, the dean or director of the student's school or division, and the dean of students. This report shall summarize the evidence and the penalties assessed.~~

~~4.3.3: Appeal. If a student's course grade is affected by the penalty, the student has the right to appeal the penalty imposed by an instructor through the Purdue Univeristy Fort Wayne (PFW)~~ ~~grade appeals system.~~ ~~(See Appendix B).~~

Part II. Student Conduct Subject to University Action

Students are expected and required to abide by the laws of the United States, the State of Indiana, and the rules, regulations, policies, and procedures of Purdue University Fort Wayne (PFW). Students are expected to exercise their freedom to learn with responsibility and to respect the general conditions that maintain such freedom. The university has developed the following general regulations concerning student conduct which are intended to safeguard the right of every individual student to exercise fully the freedom to learn without interference. The university may hold a student responsible for his or her behavior, including for academic or personal misconduct.

A. Academic Misconduct

Student's responsibilities. Academic honesty is expected of all students. The student is responsible for knowing how to maintain academic honesty and for abstaining from cheating, the appearance of cheating, and permitting or assisting in another's cheating.

Instructor's responsibilities. The instructor is responsible for fostering intellectual honesty as well as the intellectual development of students, and should apply methods of teaching, examination, and assignments which discourage student dishonesty. ~~**If necessary,**~~ **The** instructor should explain clearly any specialized

meanings of cheating and plagiarism as they apply to a specific course. **The instructor is responsible for providing students with a written course-level policy regarding the authorized/unauthorized usage of Artificial Intelligence (AI).** The instructor must thoroughly investigate signs of academic dishonesty, take appropriate actions, and report such actions properly per procedures described in Part III.A **Procedures for Academic Misconduct in the Code of Student Rights, Responsibilities and Conduct in the Catalog** to prevent repeated offenses and to ensure equity.

This type of misconduct is generally defined as any act that tends to compromise the academic integrity of the university or subvert the educational process. At Purdue University Fort Wayne (PFW), specific forms of academic misconduct are defined as follows:

1. Using or attempting to use unauthorized materials, information, or study aids in any academic exercise. The term "academic exercise" includes all forms of work submitted for grade or hours. **The term "unauthorized materials" includes those identified by the instructor**.
2. Falsifying or fabricating any information or citation in an academic exercise.
3. Helping or attempting to help another student in committing acts of academic dishonesty, including, but not limited to, sharing papers and assignments.
4. Adopting or reproducing ideas or statements of another person as one's own without acknowledgment (plagiarism).
5. Submitting work from one course to satisfy the requirements of another course unless submission of such work is permitted by the faculty member.
6. Serving as or permitting another student to serve as a substitute in taking an exam.
7. Altering of answers or grades on a graded assignment without authorization of the faculty member.
8. Engaging in activities that unfairly place other students at a disadvantage, such as taking, hiding, or altering resource material.
9. Violating professional or ethical standards of the profession or discipline for which a student is preparing (declared major and/or minor) as adopted by the relevant academic program.

In order to ensure that the highest standards of professional and ethical conduct are promoted and supported at the university, academic departments should establish a written policy/statement addressing the professional or ethical standards for their discipline, which if developed, must be available to all students who are preparing in the discipline. Students have the responsibility to familiarize themselves with the academic department's policy/statement.

A. Procedures for Academic Misconduct

When a student allegedly commits an act of academic misconduct, the faculty member teaching the course has the authority to initiate academic misconduct proceedings against the student in accordance with the following procedures.

Holds

Once a faculty member decides to initiate an academic misconduct proceeding against a student, the instructor shall inform the Chair/Director promptly to place an academic hold on the student's account in order to prevent the accused student from dropping or withdrawing from the course. If the student is found not responsible, the hold should be removed after the proceeding has concluded. If the student is found responsible, the hold shall be removed after the point which the student would have been able to drop or withdraw from the course.

Academic Misconduct Conference

The faculty member of the course in which the student has allegedly violated the Code, is required to hold a conference with the student concerning the matter within 10 business days of discovering the alleged misconduct. The faculty member must advise the student of the alleged act of misconduct and afford the student the opportunity to address the information supporting the allegation. At minimum, the requirement for the student to have the opportunity to be heard must include the following:

notice of the nature of the alleged misconduct
notice of the date, time, location, and general procedure of the review of the allegation
notice of the potential outcomes of the review
opportunity to address the information supporting the allegation
Any action that must be performed by faculty under these procedures may be performed by the faculty chair or next highest administrator.

Finding and Sanctions

If after the conference, the faculty member finds that the student did commit the act of misconduct as alleged, the faculty member is authorized to impose an appropriate academic sanction related to the particular course involved. An appropriate academic sanction for such misconduct is limited to one or more of the following:

The student may be given a lower grade than the student would otherwise have earned or a failing grade for any assignment, course work, examination, or paper involved in the act of misconduct.
The student may be required to repeat the assignment, complete some additional assignment, or resubmit any assignment, course work, examination, or paper involved in the act of misconduct.
The student may be given a lower grade than the student would otherwise have earned or a failing grade for the course.
Notification Requirements

After imposing an academic sanction, the faculty member is required to report the matter and action taken within 10 business days in writing to the following parties:

- the student

- the chair of the department in which the course is offered

- the dean/director of the college/school/division in which the course is offered

- the chair of the student's department (if different from above)

- the dean/director of the student's college/school/division (if different from above)

-the dean of students.

The student has the right to appeal the faculty member's findings and/or sanction through the procedures specified in Part III.A.I of this Code.

Additional Sanctions from the Department

The chair of the student's department has the authority to initiate additional academic sanctions against the student if the chair concludes that additional sanctions may be warranted by the nature of the act or because the student has committed previous acts of academic misconduct.

The chair of the student's department must notify the student in writing within 10 business days of the date of the faculty member's report if additional sanctions are to be assigned at the department level. If additional sanctions are contemplated, the student shall be provided an opportunity to be heard in accordance with the standards articulated in the opening paragraph of Part III, Section A.

The chair must report any decision to initiate additional sanctions in writing to the student, the student's college/school/division dean/director, and the dean of students within 10 business days of the student's opportunity to be heard.

Additional sanctions imposed at the department level may include academic probation, denial of future admission, or dismissal from the department. The student may appeal the chair's decision about additional sanctions through the procedures specified in Part III.A.I-VI. of this Code.

Additional Sanctions from the College/School/Division

The dean/director of the student's college/school/division also has the authority to initiate additional academic sanctions against the student if the dean/director concludes, in consultation with the dean of students, that additional sanctions may be warranted by the nature of the act or because the student has committed previous acts of academic misconduct. The dean/director must notify the student in writing within 10 business days of the date of the chair's report if additional sanctions are contemplated at the college/school/division level. If additional sanctions are contemplated, the student shall be provided an opportunity to be heard in accordance with the standards articulated in the opening paragraph of Part III, Section A.

The dean/director must report any decision to initiate additional sanctions in writing to the student, the original faculty member, the chair, and the dean of students within 10 business days of the student's opportunity to be heard.

Additional sanctions imposed at the college/school/division level may include academic probation, denial of future admission, or dismissal from the college/school/division. The student may appeal the dean's/director's decision about additional sanctions through the procedures specified in Part III.A.I-VI. of this Code.

Procedures for Specialty/Other Cases of Academic Misconduct

When a student is alleged to have committed an act of academic misconduct that is not related to a course in which the student is enrolled, the chair of the student's department has the authority to initiate a review of the allegation.

After discovering the alleged academic misconduct, the chair must notify the dean of students and the student in writing within 10 business days if action is contemplated at the department level and provide the student an opportunity to be heard in accordance with the standards articulated in the opening sentence of Part III, Section A.

The chair must report the decision, including any sanctions imposed, in writing to the student, the student's college/school/division dean/director, and the dean of students within 10 business days of the student's opportunity to be heard.

Sanctions imposed at the department level may include, and are limited to, one or more of the following: academic probation, denial of future admission, or dismissal from the department. The student may appeal the chair's decision (including sanctions) through the procedures specified in Part III.A.I-VI. of this Code.

Similarly, the dean/director of the student's college/school/division has the authority to initiate additional academic sanctions against the student if the dean/director concludes that additional sanctions may be warranted

by the nature of the act or because the student has committed previous acts of academic misconduct in accordance with the procedures above.

The dean/director must report any decision to initiate additional sanctions in writing to the student, the chair, and the dean of students within 10 business days of the student's opportunity to be heard.

Additional sanctions imposed at the college/school/division level may include, and are limited to, one or more of the following: academic probation, denial of future admission, or dismissal from the college/school/division. The student may appeal the dean's/director's decision about additional sanctions through the procedures specified in Part III.A.I-VI. of this Code.

Sanction Restrictions

A student may not be placed on disciplinary probation, suspended, or expelled from the university because of an act of academic misconduct unless the dean of students concludes that such a sanction is justified by the nature of the act or because the student has committed previous acts of misconduct. If the dean of students concludes that additional disciplinary sanctions are warranted, the proceedings will be governed by the same procedures that apply to acts of personal misconduct (Part III.B) and may be commenced when notified of the outcome from the faculty member.

I. Appeals for Academic Misconduct

The Campus Appeals Board (CAB) may hear the following types of appeals from students:

appeals of academic misconduct findings imposed by faculty members, department chairs, or academic deans or division directors
appeals of SGA Judicial Court rulings
appeals of faculty/staff decisions claimed to violate student rights recognized in Part I of the Code. Extension to any time limits specified below must be approved by the chair of the board.
II. Campus Appeals Board

Composition. The Campus Appeals Board (CAB) shall consist of nine members selected in the following manner: four students appointed by the president of Purdue University Fort Wayne Student Government Association subject to confirmation by the SGA Senate; three faculty members elected by the Faculty Senate; and two administrative staff members appointed by the chancellor, one of whom shall be designated as chair of the Campus Appeals Board. An equal number of alternates from each constituent group shall be appointed at the same time and in the same manner as the regular members. From the members and alternates, the chair shall designate a hearing panel consisting of a minimum of three members including at least one student. A minimum of three panel members including at least one student is required for quorum.

Terms of Office. The term of office for student members and their alternates shall be one year, and for the faculty and administrative members, it shall be two years, except that members shall continue to have jurisdiction of any case under consideration at the expiration of their term. The terms of office for all members shall begin at the start of the fall semester. No member shall serve more than two consecutive terms. If any appointing authority fails to make its prescribed appointments to the Campus Appeals Board, or to fill any vacancy on the panel of alternates within seven calendar days after being notified to do so by the chancellor, or if at any time the Campus Appeals Board cannot function because of the refusal of any member or members to serve, the chancellor may make appointments, fill vacancies, or take such other action as deemed necessary to constitute the Campus Appeals Board with a full complement of members.

III. Criteria for Appeal

Appeals may only be requested for one or more of the following reasons:

Failure to follow an established policy or procedure
The assigned sanction is unduly harsh or arbitrary
New information has become available since the conclusion of the process
Bias has been exhibited through the process.
The purpose of an appeal shall not be simply to hold a rehearing of the original matter.

IV. Filing the Petition

Students who wish to request Campus Appeals Board action shall complete the online form within 10 business days of the date of the sanction letter or within 10 business days of the conclusion of the previous step in the appeal process, as applicable. The dean shall in turn forward properly filed appeals to the chair of the Campus Appeals Board.

To be properly filed, the appeal must be submitted within the established time limits, identify the action or decision being appealed, name the party whose decision or action is being appealed (sometimes referred to below as the "named party"), and identify one or more of the criteria identified in the Criteria for Appeal set forth above. If the above criteria are not met, the CAB chair shall dismiss the appeal.

V. Investigation of Appeals

Within 10 business days of the chair's receipt of the appeal, the CAB chair will assign a board member or alternate who is a faculty member or administrator to investigate the appeal and notify the party named that an appeal has been filed. Notification will include a copy of the appeal and the identity of the student who filed the appeal. The party whose action or decision is being appealed will be requested to respond in writing within 10 business days from the date of notification. To protect both the student and the named party, CAB appeals will be treated with the greatest degree of confidentiality possible.

As soon as practicable following appointment, the investigator will interview the student who filed the appeal. The student may have an advisor or legal counsel (at the student's own expense) present at meetings with the investigator. However, the advisor or counsel may not stand in place of the student or otherwise participate in the investigation process.

Within 10 business days following completion of the interview with the student, the investigator will notify the chair as to whether or not the allegations set forth in the appeal, if substantiated, would support the basis for the appeal and, if so, whether the action or decision being appealed would constitute a violation of one or more student rights recognized in Part I of the Code. If in such notification the investigator answers these inquiries in the negative, the chair may dismiss the appeal, and the decision shall be final. The chair shall provide the student and named party with written notice of such dismissal. In all other cases, the investigator will conduct a thorough fact-finding investigation, and will meet separately with the student and named party, interview pertinent witnesses, and review relevant documents regarding the appeal. The investigation shall be completed within 10 business days following the assignment of the appeal to the investigator.

Within 10 business days following conclusion of the investigation, the investigator will prepare and deliver a report to the chair, the student filing the appeal, and the named party. The report will include a finding based upon a preponderance of information that the appeal shall be upheld or denied. The "preponderance of information" standard requires that the information supporting the finding is more convincing than the information offered in opposition to it. The report will include the basis upon which the investigator reached the finding and recommendation for remedy, if any.

VI. Determination

Within 10 business days of receipt of the investigator's report, the chair will convene a meeting of the CAB hearing panel. The student and the named party will be notified of the date, time, and location of the meeting. Prior to the meeting, the student, named party, and panel members shall be furnished with a copy of the investigator's report and copies of the appeal and response. The student may have an advisor or legal counsel (at the student's own expense) present at the meeting. However, the advisor or counsel may not stand in place of the student or otherwise participate in the hearing process. At the meeting the panel will be afforded the opportunity to ask questions of the investigator. The student who filed the appeal and the named party will be afforded the opportunity to make a brief statement to the panel, after which the panel members may ask questions. The panel shall meet separately with the student and the named party.

Within 10 business days following the final meeting with the panel, the chair shall render the written recommendation of the hearing panel and include a brief explanation of the recommendation setting forth the findings upon which the recommendation is based. The chair shall furnish copies of the recommendation to the chancellor, the student who filed the appeal, the party whose decision is being appealed, and to others within the university with a need to know as determined by the panel. The chancellor shall render a written and final decision within 10 business days of receiving the panel's recommendation.

VII. Student Complaint Procedures

The following student complaint procedures are designed to ensure that students have an identified and well-understood mechanism for registering and resolving complaints of the types described below.

A. Students having complaints concerning alleged violations of the Anti-Harassment Policy should use the Purdue University Procedures for Resolving Complaints of Discrimination and Harassment.

B. Students having complaints concerning actions or decisions which are claimed to violate other rights recognized in Part I of the Code must first make a reasonable effort to resolve the complaints informally with the faculty/staff member whose action or decision is the basis for the complaint.

The effort to resolve the complaint informally with the faculty/staff member must be initiated by the student in a documented manner no later than within 21 calendar days the action or decision occurred. The documentation only needs to be dated and indicate that the student has made a good faith effort at initiating the conversation with the responsible faculty/staff member. For a complaint to continue to receive consideration under these procedures, the student must initiate each successive step in the process within 21 calendar days of conclusion of the previous step. In addition, it is expected that each step in the process will be concluded within 21 calendar days of initiation.

If the complaint is not resolved informally between the student and the responsible faculty/ staff member, the student may pursue the complaint informally with the faculty/ staff member's department head, who shall investigate, mediate, and suggest a resolution.

If the complaint remains unresolved after the department head's attempt to mediate a resolution, the student may continue to pursue the complaint with the head of the next highest administrative level (e.g., the college/school/division dean/director), who shall investigate, mediate, and suggest a resolution.

Only after all such remedies have been exhausted may the student petition for a hearing before the Campus Appeals Board. To petition for a hearing before the Campus Appeals Board, the student must complete the online form. The complaint must describe the action or decision claimed to violate one or more of the student rights recognized in Part I of the Code, identify the right(s) claimed to have been violated, and specify the remedy sought. The dean shall direct properly received complaints to the chair of the Campus Appeal Board.

The Campus Appeals Board shall have the authority and duty to reach findings and to convey recommendations to the chancellor. If necessary, the chancellor may present such recommendations to the university president and Board of Trustees for their consideration.

TO: Fort Wayne Senate
FROM: Stephen Buttes, Chair of the Student Affairs Committee
DATE: 11/17/2023
SUBJ: Proposal for Revision Senate Bylaws

WHEREAS, the Mastodon Athletics Advisory Subcommittee (MAAS) received the below charge from the Senate Executive Committee to consider its membership and composition as stated in the Senate Bylaws; and,

WHEREAS, the MAAS approved the resolution below to change the Senate Bylaws to meet the charge the Senate Executive Committee sent to it; and,

WHEREAS, the MAAS, as a subcommittee of the Student Affairs Committee (SAC), sent their resolution to the SAC for review; and,

WHEREAS, the members of the SAC requested no revisions to the MAAS resolution;

BE IT RESOLVED, that the Senate consider the proposed change in membership composition outlined in the MAAS resolution; and,

BE IT FURTHER RESOLVED, that the Senate's approval of this resolution shall be considered an approval of the MAAS resolution below.

Approve:	Against:	Abstain:
Stephen Buttes		Noor Borbieva (on sabbatical)
Modinat Moshood		Matthew Perkins Coppola (on sabbatical)
Wylie Sirk		
Kylie Stultz Dessent		
Kristina Surface		
Nashwan Younis		

M E M O R A N D U M

To: Michelle Parker;
Chair, Mastodon Athletics Advisory Subcommittee

And

Stephen Buttes;
Chair, Student Affairs Committee

From: Jay Johns
Chair, Executive Committee of the Fort Wayne Senate

Date: October 2nd, 2023

Subj: Charge to Consider CSSAC Representation on Mastodon Athletics Advisory Subcommittee

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Dear Mastodon Athletics Advisory Subcommittee:

The Campus Support Staff Advisory Committee (CSSAC) has asked the Senate Executive Committee to consider adding a seat to the Mastodon Athletics Advisory Subcommittee so they can have representation. It is noted that the Administrative & Professional Staff Advisory Council (APSAC) already has a standing seat on the Mastodon Athletics Advisory Subcommittee.

<u>The Executive Committee hereby asks you to work on the following charges:</u>

(1) Consider adding a CSSAC seat to the Mastodon Athletics Advisory Subcommittee.

(2) Report the decision to the Student Affairs Committee (SAC) by the end of November 2023. The SAC will notify the Senate Executive Committee. If the decision is to add a CSSAC seat to the Mastodon Athletics Advisory Subcommittee, the Senate Executive Committee can start the process of updating the Bylaws of the Senate.

Sincerely,

Jay Johns
Chair, Senate Executive Committee

M E M O R A N D U M

To: Stephen Buttes;
Chair, Student Affairs Committee

From: Michelle Parker
Chair, Mastodon Athletics Advisory Subcommittee (MAAS)

Date: October 19th, 2023

Subj: Charge to Consider CSSAC Representation on Mastodon Athletics Advisory Subcommittee

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Dear Student Affairs Committee:

The Mastodon Athletics Advisory Subcommittee (MAAS) received a charge from the Senate Executive Committee on October 2, 2023 to consider adding a Campus Support Staff Advisory Committee (CSSAC) seat to MAAS so they can have representation. MAAS unanimously (7-0) agreed to add a CSSAC seat to MAAS at our meeting on October 6, 2023. We ask that Student Affairs notify the Senate Executive Committee to start the process of updating the Bylaws of the Senate. I have included the resolution in a separate document.

Sincerely,

Michelle R. Parker
Chair, Mastodon Athletics Advisory Sub-committee

TO: Stephen Buttes, Chair of the Student Affairs Committee
FROM: Michelle Parker, Chair of the Mastodon Athletics Advisory Subcommittee
DATE: 10/06/2023
SUBJ: Proposal for Revision Senate Bylaws

WHEREAS, the Senate Bylaws currently state in Section 5.3.4.3.1 under the Mastodon Athletics Advisory Subcommittee heading:

5.3.4.3.1.	Membership: The Mastodon Athletics Advisory Subcommittee shall consist of eight Voting Faculty and lecturers elected by the Senate in such manner that at least four of the Major Units shall be represented; two students selected by the Student Government; the Faculty Athletics Representative (ex officio); the NCAA Compliance Coordinator (ex officio, nonvoting); one PFW alumnus/alumna appointed ex officio by the Chief Administrative Officer in consultation with the administrator of alumni relations; an administrative/professional staff member; the senior women's athletic administrator; and the administrator of athletic programs (nonvoting). The Presiding Officer of the Senate shall annually request the Student Government to select the student representatives and the Administrative Council to select the administrative/professional staff representative. Student representatives shall serve staggered two-year terms with the terms to commence one week before the beginning of regular fall classes. The administrative/professional staff representative shall serve for one year. The Faculty Athletics Representative shall serve as the chair of the committee.

WHEREAS, to gain perspective from multiple areas of the campus, the Mastodon Athletics Advisory Subcommittee would like to change the Senate Bylaws and add a Campus Support Staff Advisory Committee (CSSAC) representative to the subcommittee.

WHEREAS, the Mastodon Athletics Advisory Subcommittee already has representation from each unit on campus, including the Administrative & Professional Staff Advisory Council (APSAC)

BE IT RESOLVED, that section 5.3.4.3.1 of the Senate Bylaws is updated to state:

5.3.4.3.1.	Membership: The Mastodon Athletics Advisory Subcommittee shall consist of eight Voting Faculty and lecturers elected by the Senate in such manner that at least four of the Major Units shall be represented; two students selected by the Student Government; the Faculty Athletics Representative (ex officio); the NCAA Compliance Coordinator (ex officio, nonvoting); one PFW

	alumnus/alumna appointed ex officio by the Chief Administrative Officer in consultation with the administrator of alumni relations; an administrative/professional staff member; the senior women's athletic administrator; and the administrator of athletic programs (nonvoting). The Presiding Officer of the Senate shall annually request the Student Government to select the student representatives ~~and~~ ,the Administrative Council to select the administrative/professional staff representative, and the Campus Support Staff to select a Support Staff representative. Student representatives shall serve staggered two-year terms with the terms to commence one week before the beginning of regular fall classes. The administrative/professional staff representative and the Support Staff representative shall serve for one year. The Faculty Athletics Representative shall serve as the chair of the committee.

In Favor **Against** **Abstain**

Michelle Parker
Troy Tonner
Barton Price
Farah Combs
Kate White
Talia Bugel
Tamara Cummins

Senate Reference No. 23-15

Question Time

Many indicators suggest that higher education in the United States will face a significant decrease in enrollment due to population decline and other factors (please see Insitute of Education Services (ERIC), Inside HigherED, and Chronicle).

What plans does the university have to preempt the "enrollment cliff?" What role(s) are faculty expected to have in the process?

A. Nasr

Senate Reference No. 23-16

MEMORANDUM

TO: 2023-2024 Senate Executive Committee

FROM: K. Fineran

Chair, Graduate Subcommittee

DATE: November 30, 2023

SUBJECT: Graduate Program Proposal: Master's Degree in Applied Physics

The Graduate Subcommittee reviewed and supports the proposal from the Department of Physics in the College of Science for a new program: Masters of Science in Applied Physics. We find that the proposal requires no Senate review.

Thank you for the opportunity to review this new program.

Approved	**Opposed**	**Absent**	**Non-Voting**
Kerrie Fineran	Lukmon Otunubi	Alan Legg	Abraham Schwab
Kate White			Terri Swim
Sarah Wagner			
Hadi Alasti			
Lyzbeth King			
John Minnich			
Nurgul Aitalieva			

Degree/Certificate/Major/Minor/Concentration Cover Sheet

Date: 10/25/2023

Institution: Purdue

Campus: Fort Wayne

School or College: College of Science

Department: Physics

Location: On Campus 80% or more online: Yes ○ No ◉

County: Allen

Type: New Degree Level

Program name:

Masters of Science in Applied Physics

Graduate/Undergraduate: Graduate

Degree Code: MS

Brief Description:

The Master of Science in Applied Physics is a program that advances students' physics knowledge, sharpens their experimental and/or computational skills, develops their strength in building quantitative models and utilization of scientific tools in applied physics, and prepares students for a professional career or doctoral studies.
The MSAP program offers opportunities for research &/or courses in Opto-electronics, Materials science, and Acoustics. It is designed to be accessible to those with bachelor's degrees in Physics and closely related fields, such as Math, Chemistry, or Engineering, and to be doable either full-time or part-time in evenings for those who work. We provide supportive, research-based pedagogy with a track record of success. The students will complete the program with experimental, computational, and analytical skills that allow them to apply their physics content knowledge to industrial problems.

Rationale for new or terminated program:

Opto-electronics, materials science, and acoustics are valuable to industry, but not currently addressed by other PFW MS programs. (PFW's Electrical and Mechanical Engineering programs currently focus on other specialties.) National investments in these fields include the 2011 Materials Genome Iniative, the 2018 National Quantum Initiative Act, 2018 move to establish Quantum Information Science research institutes, and the 2022 CHIPS & Science Act. The Greater Fort Wayne Inc Metro Chamber Alliance has identified target industries that include Advanced Materials. Local companies employing many of our Physics BS alumni include Fort Wayne Metals, Raytheon, BAE, Ultra Maritime, and L3Harris. Many of our current students and alumni, as well as other local area physicists, have expressed interest in pursuing this degree opportunity here at Purdue Fort Wayne. There is no other MSAP program in Indiana, though there are some programs with overlapping areas of interest, including at Ball State, IUPUI, and PWL.

CIP Code: 14.1201

Name of Person who Submitted Proposal:

Gang Wang

Contact Information (phone or email): wangg@pfw.edu

Master of Science in Applied Physics

To Be Offered by the College of Science at Fort Wayne Campus

a. Program Description – *The Master of Science in Applied Physics is a program that advances students' physics knowledge, sharpens their experimental and/or computational skills, develops their strength in building quantitative models and utilization of scientific tools in applied physics, and prepares students for a professional career or doctoral studies.*

b. NCES Degree Level[1]: Master's Degree

c. Major: Applied Physics

d. Other (majors or concentrations associated with new degree)

e. Mode of Delivery (Residential [<25% online; Hybrid [25-80% online; Online [> 80% online]):

Residential

f. Prospective Curriculum

Please see details in the full proposal, Appendix 4.

g. Suggested CIP Code for Program: 14.1201

h. Any new or special tuition rate/fee for this program?

a. No
b. Yes, PWL
c. Yes, PFW/PNW

i. Admission Requirements – *Please include any specific requirements above and beyond the standard entry requirements for Applicants.*

[1] National Center for Education Statistics Award Level Definitions

Program Description

Master of Science in Applied Physics
To Be Offered by the College of Science, Purdue University Fort Wayne

1. Characteristics of the Program
   a. **Campus Offering Program**: Purdue University Fort Wayne
   b. **Type of delivery:** On-campus only
   c. **Mode of Delivery:** Classroom/Lab
   d. **Other delivery aspects:** Capstone Project
   e. **Academic Unit Offering Program:** Department of Physics in the College of Science

2. Rationale for the Program
   a. **Institutional Rationale (Alignment with the Institutional Mission and Strengths)**

As northeast Indiana's comprehensive metropolitan public university, it is appropriate for Purdue Fort Wayne to have programs that serve and partner with local industry. A Master of Science in Applied Physics (MSAP), with opportunities for research or coursework in opto-electronics, materials science, or acoustics, would fill a niche valuable to industry but not currently addressed by other PFW MS programs. (PFW's electrical and mechanical engineering programs currently focus on other specialties.) Targeting areas of need for local industries would be in keeping with PFW Strategic Plan 2020-2025 Promote Engagement with our Communities Objective 2, Strategic Activity 2.2. "Develop undergraduate and graduate programs that drive economic development, increase social mobility, and address community needs". The most recent Northeast Indiana Target Report has a list of current target industries including vehicles, medical device & technology, and advanced materials.[1] The previous targets included all the current targets, along with defense, which remains a big industry in Fort Wayne. We have many alumni from our Bachelor of Science in Physics program employed in all of these industries, so adding the MSAP would further contribute to meeting the needs of these local industries, and equip individuals in the area to advance in their careers.

The MSAP will build on our award-winning undergraduate program that includes concentrations in biomedical physics, optoelectronics and photonics, engineering physics, computational/mathematical physics, materials science, and astrophysics. Because of the broad foundation that undergirds a physicist's training, they bring a uniquely holistic and basic principles approach to problem-solving. This complements the specialized view of those educated in engineering disciplines. Physicists' core education includes mechanics, electricity & magnetism, quantum mechanics, and thermodynamics, equipping them to communicate with and translate between people of many disciplines, including mechanical engineering, electrical engineering, and chemistry. Multi-disciplinary teams come up with more creative solutions to problems. The American Institute of Physics explains that "Applied physicists use physics or conduct physics research to develop new technologies or solve engineering problems," and lists "Fiber optics, astrophysics, vacuum tunneling, nondestructive testing, acoustics, semiconductors, laser and quantum optics, and condensed matter" as "booming fields at present."[2] In addition, due to their analytic and modelling skills, physicists are often sought for Data Science, Financial Analyst, and a variety of R & D positions. The job title "physicist" essentially does not exist in industry, but

[1] https://www.greaterfortwayneinc.com/wp-content/uploads/2015/07/Target-Industry-Study_final_-6.6.16.pdf
[2] https://www.aip.org/jobs/profiles/applied-physics-jobs

physicists are valued for their broad foundational understanding and ability to simplify complex problems. Their job titles usually include the word "engineer", but they often perform different functions than those educated as engineers, looking at whole systems instead of specialized parts. Besides all manner of engineering occupations, physicists will be found with the job title material scientist. Materials science is interdisciplinary and involves physicists, chemists, and a variety of engineers. The MSAP curriculum will be designed to be accessible to physics, chemistry, engineering, and math majors.

The Physics Department's culture has long exemplified PFW's core values of Students First, Excellence, Innovation, Diversity & Inclusion, and Engagement. We do this through practices such as building community among students, faculty, and staff; outreach events that share the wonder of physics with the public; research-informed interactive engagement pedagogy in our courses; and requiring research and practical skill development for all students. We have a track record of success at PFW's stated aspiration that "We will prepare students for academic, personal, and professional success. Through an enriching and supportive environment, students will be exposed to new thoughts and ideas, promoting confidence and maximizing their potential." Our exit interviews and informal interactions with alumni indicate they are appreciative of their experiences here, including the relationships built within the department, and the development of their thinking skills. They are professionally successful, most with titles such as electrical engineer, acoustic engineer, optical engineer, systems engineer, design engineer, data scientist, etc.

The number of physics majors who graduated from the PFW Physics BS program in 2019 was in the 90th percentile nationwide for undergraduate only physics programs according to the American Institute of Physics. Over the past 10+ years, about half of our approximately 86 alumni have stayed to work in local industries. Many want further education, but do not necessarily want to pursue a Purdue Fort Wayne MS in Math or Engineering, or an online degree from another institution. Of 21 respondents to a survey of PFW Physics alumni conducted in Spring 2021, 11 were interested and 5 were potentially interested in the proposed MSAP. Several other individuals contacted the department to express interest after the survey was closed. Tapping into this demand aligns with PFW Strategic Plan Enhance Quality of Place Objective 1, Strategic Activity 1.1: "Strengthen our reputation for the quality of student experience and career preparedness, leading to growth in undergraduate and graduate student enrollment," and with the Expected Behavior of contributing "to lifelong learning opportunities."

The MSAP program will be structured to accommodate students working full time by scheduling classes in the early evening, encouraging them to connect their capstone project to their work, and our philosophy of supporting students academically, for example if they need refreshers about past academic subjects. The MSAP can give its graduates the skills and credentials needed to advance to positions of higher responsibility, in alignment with PFW Strategic Plan Expected Behavior of Human Capital Development and Social Mobility through "delivery of relevant degree... programs to build skill sets" and promoting "social mobility through the delivery of educational programs and experiences that benefit the populations of our region." We will pursue ABET accreditation to make the program more valuable to students and employers. Obtaining and maintaining ABET accreditation will require ongoing assessment of the program and "a culture of continuous improvement in all we do", which is also one of PFW's core values.

As given in full detail in the Program Competencies section near the end of this document, the proposed MSAP learning outcomes include goals that match with PFW's values. PFW's mission is to "educate and engage our students and communities with purpose by cultivating learning, discovery, and innovation in an inclusive environment." PFW Strategic Plan has an Expected Behavior of encouraging "the pursuit of new ideas, entrepreneurial thinking, and interdisciplinary collaboration." These values are reflected in the learning outcomes of the "ability to develop and

conduct experiments" (Learning Outcome #3), to "demonstrate the role of physics in industry or entrepreneurism" (Learning Outcome #8), and "to function on teams" (Learning Outcome #6). A capstone project will be required of all students, in keeping with the PFW Expected Behavior to "Advance research, scholarship, and creative endeavor." Our plan to develop partnerships with local industry aligns with PFW's Expected Behavior that "the university plays a key role in business retention, attraction, and expansion efforts through applied research, technology development, and other economic engagements."

b. State Rationale

The proposed MSAP's requirement of a capstone project is in line with Governor Holcomb's commitment to "making Indiana a global leader in innovation and entrepreneurship"[3] It is also in line with the following priorities and guiding principles in ***Reaching Higher In A State Of Change***.[4]

- Talent priority: Require 100 percent of postsecondary programs to have an internship, work-based learning, research project or other student engagement experience that has career relevance.
- Community Engagement: Foster a culture that values lifelong learning and develop partnerships that improve the economic health and vitality of communities.
- Quality: Emphasize excellence to ensure lifelong learner success and meet employer, economic and civic needs.
- Equity: Ensure academic rigor and workforce relevance are prioritized.
- Learner-Centered: Emphasizing the needs of individual learners.
- Talent-Driven: Increased collaboration among institutions, employers, and communities to meet economic need.
- Future-Focused: Meet the needs of an uncertain future economy.
- Completion: When learners pursue and complete credentials that provide individual opportunity, it naturally strengthens Indiana's economy.

Regarding item 2 about lifelong learning, we get periodic inquiries from local physicists asking about graduate study opportunities. For items 3 & 4 about excellence, learner success, and academic rigor, our department's research based pedagogy and strong support of students' success was recognized by the American Physical Society's award of "2014-2017 Department of Distinction for supporting best practices in education". One way we support student success is through placing a high value on getting to know each student and their own particular circumstances to meet their specific needs and goals, in line with item 5 of being Learner-Centered, as well as item 4 on Equity. Because the MSAP will be designed to allow students already in the workforce to participate, those students are likely to center their capstone project around the needs of their employer, in line with item 6 of being Talent-Driven. The degree will allow people working in local industry to come back to grow their skills any time the need arises for their employer or for their own personal growth, in line with item 7 of being Future-Focused, and item 8 on Completion. The Completion section of *Reaching Higher* further acknowledges that "completion is comprehensive—including everything from micro-credentials … to … graduate degrees—allowing learners to build, expand, stack and show

[3] https://www.iedc.in.gov/program/innovation-entrepreneurship/overview
[4] https://www.in.gov/che/files/2019-20_Strategic_Plan_03-14-2020-spreads.pdf

what they know throughout their careers." The partnerships we hope to build with local companies will help ensure the credential has "meaning and value to our state's employer community and the Hoosiers they employ."

Because of its breadth and emphasis on understanding of fundamental principles that underlie all technology, applied physics is uniquely positioned to produce "well-rounded, analytical people" who are "critical and creative thinkers with communication and problem-solving skills." Our pursuit of ABET accreditation also will help "demonstrate that learners have acquired the competencies employers need," all of which are mentioned in the Talent section of *Reaching Higher.*[5]

c. Evidence of Labor Market Need

i. National, State or Regional Need

Our nation has a history of investing in materials and quantum research to aid in the emergence of new technologies. In 2011 there was the Materials Genome Initiative, "a federal multi-agency initiative for discovering, manufacturing, and deploying advanced materials."[6] In December 2018, the National Quantum Initiative Act was signed into law, in order to "accelerate quantum research and development for the economic and national security of the United States."[7] In August 2020, the White House :announced over $1 billion in awards for the establishment of 12 new artificial intelligence and quantum information science (QIS) research institutes nationwide."[8] In 2022, the CHIPS & Science Act allocated $50 billion in chips manufacturing and R&D funding.[9] Purdue West Lafayette is involved in both the national QIS effort through its Quantum Science and Engineering Institute,[10] and in the national semiconductor effort through recent creation of its Semiconductor Degrees Program that includes an interdisciplinary master's degree.[11] Nine of 13 faculty involved with Purdue West Lafayette's Quantum Science and Engineering Institute are physicists, demonstrating the relevance of physics to the effort. A PFW MSAP can prepare students in our region to innovate in the interrelated quantum science, materials science, and semiconductor sectors.

The Northeast Indiana Regional Partnership his identified target industries including Medical Devices, and Defense & Aerospace.[12] Greater Fort Wayne Inc Metro Chamber Alliance has identified target industries including Medical Devices & Tech, and Advanced Materials.[13,14] Many of our PFW Physics BS graduates have gone on to work in these industries. In materials work, we have

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[5] https://www.in.gov/che/files/2019-20_Strategic_Plan_03-14-2020-spreads.pdf

[6] https://www.mgi.gov/about

[7] https://www.quantum.gov/

[8] https://www.energy.gov/articles/white-house-office-technology-policy-national-science-foundation-and-department-energy?_ga=2.194427117.1776090677.1633813325-1938445947.1633813325

[9] https://www.whitehouse.gov/briefing-room/statements-releases/2022/08/25/fact-sheet-president-biden-signs-executive-order-to-implement-the-chips-and-science-act-of-2022/

[10] https://www.purdue.edu/newsroom/releases/2020/Q3/purdue-to-participate-in-national-quantum-science-research-push.html

[11] https://www.purdue.edu/newsroom/releases/2022/Q2/purdue-launches-nations-first-comprehensive-semiconductor-degrees-program.html

[12] https://neindiana.com/doing-business-here/target-industries

[13] https://www.greaterfortwayneinc.com/economic-development/target-industries/

[14] https://www.greaterfortwayneinc.com/wp-content/uploads/2015/07/Target-Industry-Study_final_-6.6.16.pdf

had students and alumni do the following, where the number in parenthesis is the number of our people who have been involved in it.

Fort Wayne Metals, metal analyst (1)
Fort Wayne Metals, mechanical design engineer (1)
Continental Diamond Tool (New Haven), ceramics engineering (1)
DePuy Synthes, Orthopaedics Company of Johnson & Johnson (Warsaw), metallurgy (1)
Paragon Medical Implants, quality engineer (1)

Notice that materials work and medical devices overlap in the list above. In the defense industry we have had students work at

Raytheon (2)
BAE (3)
Ultra Maritime (formerly USSI) (4)
L3Harris (8 currently and several others in the past)
Northrup Grumman (2).

Beyond the target industries of Medical Devices, Defense & Aerospace, and Advanced Materials, we have had graduates work as engineers at Shambaugh and Sons, Kautex, Convoy Technology, and Regal Beloit, which all have a local presence.

ii. Preparation for Graduate Programs or Other Benefits

The MSAP can aid students in preparing for further graduate study in physics, materials science, optics, or engineering. Our pedagogy stresses sense-making, so the coursework will give students a better understanding of the fundamental principles underlying these fields. Additional research experience through the required capstone project, and additional teaching experience as Graduate Teaching Assistants are also valued by graduate programs. We will train our GTAs to use research-based pedagogy to enhance their effectiveness as instructors, making them more valuable to other graduate programs.

Anecdotal discussion with several recent graduates and other area physicists suggests they miss the intellectual stimulation of formal study and would find the educational experience of the MSAP personally enriching beyond just job preparation.

iii. Summary of Indiana DWD and/or U.S. Department of Labor Data

People educated as physicists are often hidden in roles with a variety of job titles. According to the American Institute of Physics, about three-quarters of those with new bachelor's degrees in physics, and half of those with new master's degrees are employed in either engineering, computer or information systems, or other STEM fields. The remaining new degree holders are in physics/astronomy, education, or non-STEM jobs.[15,16] An analysis of the labor market for the MSAP requires looking beyond the physicist category.

Data from Indiana's Department of Workforce Development (IN DWD) is presented in detail in Appendix 1 for two broad categories of fields: physical science and engineering. For Allen County, raw demand is significantly higher for engineering, but projected growth for 2018 to 2028 is significantly higher for the physical sciences (with a simple average of 20%) than for engineering (with a simple average of negative 8%). Looking at the state as a whole, the projected growths are more similar, averaging 8% for the physical sciences and 6% for engineering. Graduates of the

[15] https://www.aps.org/careers/statistics/bsprivatesec.cfm
[16] https://www.aip.org/statistics/physics-trends/field-employment-new-physics-masters

MSAP program will be equipped to fill either role, so they are both ready to meet current needs, and positioned for the future.

Data from the U.S. Bureau of Labor Statistics for both engineering and physical science occupations is also included in Appendix 1. Because of having a projected growth rate of 8% for the nation, Physicist is on a list of "Bright Outlook" occupations.[17] For every occupation listed, the state projected growth rate is 5% or more.

iv. National, State, or Regional Studies

What follows is discussion of a number of initiatives that our federal government has prioritized, and how physics in general and our department's strengths in particular can contribute to these endeavors. If students go to graduate school in the area, they are more likely to stay in the area.

In 2020, the "Quantum Frontiers Report on Community Input to the Nation's Strategy for Quantum Information Science" gathered input from the quantum information science community and synthesized eight priorities for research and federal investment.[18] The PFW Physics Department has researchers who may be able to contribute to such goals as "Harnessing Quantum Information Technology for Precision Measurements," "Implementing Algorithms on Available Devices and Exploring Their Performance", "Enabling Quantum State Transduction", and "Expanding the Limits of Physical Theory ".

"A Quadrennial Review of the National Nanotechnology Initiative" published on April 7, 2020, by the National Academies of Sciences, Engineering, and Medicine (NASEM), identifies three priorities for the National Nanotechnology Initiative, which began in 2003. One of these is "increased recruitment and training of future scientists and engineers, with an intentional focus on accelerated technology translation, and with robust investments in next-generation infrastructure to support basic science and commercialization." Nanoscience and technology contributes to areas as diverse as "medicine, food, water, energy, microelectronics, communications, defense."[19]

The Materials Genome Initiative began in 2011 with the goal of shortening the time scale between discovery and deployment of new materials.[20] As reported in "New Frontiers for the Materials Genome Initiative," published April 5, 2019, and emphasized in *Creating The Next-Generation Materials Genome Initiative Workforce* (The Minerals, Metals & Materials Society (TMS), Creating the Next-Generation Materials Genome Initiative Workforce (Pittsburgh, PA: TMS, 2019)), this is accomplished "by synergistically combining experiment, theory, and computation". Physics plays a prominent role in the examples of successful application of MGI principals described in the article. One "combined physics-based molecular modeling, small-angle X-ray scattering, and evolutionary optimization to accurately deduce the molecular structure of experimental films in unprecedented detail". Another "applied quantum mechanical simulations to design, in silico, a room-temperature polar metal exhibiting unexpected stability, and then successfully synthesized this material using high-precision pulsed laser deposition."[21] Atomic, molecular, and optical physics is a research focus for several of our faculty. This, along with the emphasis on computational physics that is infused throughout our curriculum, positions us to support students interested in similar projects. An effort can be made to have projects available that fit with the goals of MGI.

[17] https://www.onetonline.org/find/bright?b=1

[18] https://www.quantum.gov/wp-content/uploads/2020/10/QuantumFrontiers.pdf

[19] https://www.ncbi.nlm.nih.gov/books/NBK561705/

[20] https://www.mgi.gov/sites/default/files/documents/materials_genome_initiative-final.pdf

[21] https://www.nature.com/articles/s41524-019-0173-4

The semiconductor industry employs around a quarter million people in the US, around a quarter of whom are in design or engineering roles.[22,23,24] About 26% of workers in the semiconductor industry have graduate degrees, and another 30% have Bachelor's degrees.[25] The Semiconductor Industry Association (SIA) in their document, "Charting a Course for Success: America's Strategy for STEM Education," published September 4, 2020, talks about graduate education generating expertise in materials science, physical chemistry, and electrical engineering being important to the semiconductor industry.[26] Applied physics is widely acknowledged as one pathway to a semiconductor career.[27,28,29] Eighty-two percent of executives responding to a Deloitte-SEMI survey mentioned a shortage of qualified candidates in fields critical to the semiconductor industry.[30] In March 2022, Intel & the US National Science Foundation (NSF) announced new investments in education & research in chip design and manufacturing.[31]

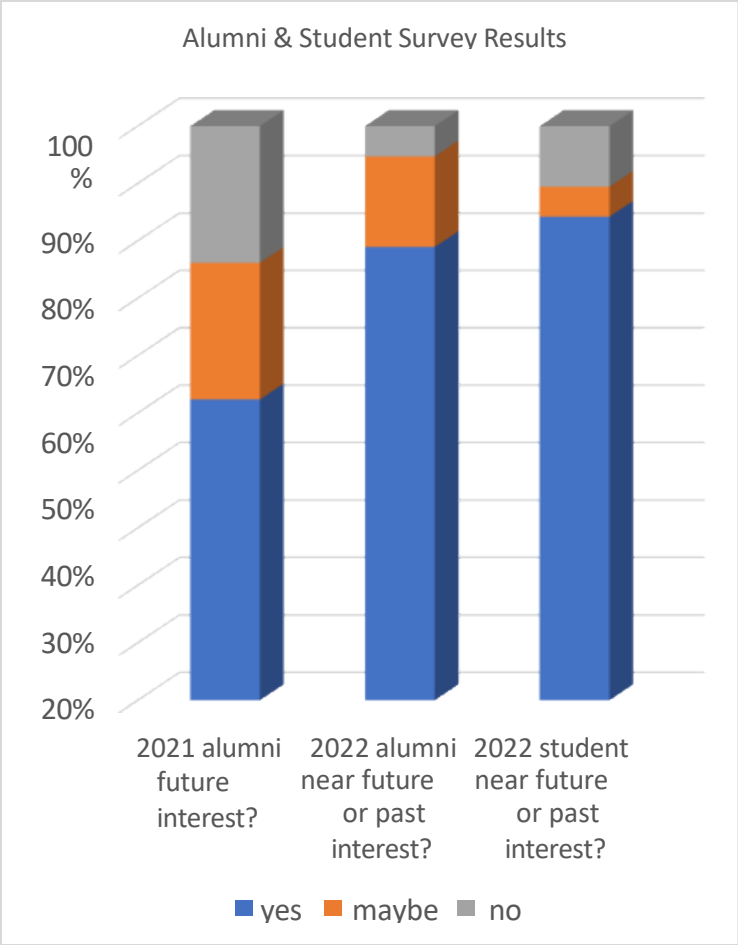
i. Surveys of Employers or Students and Analyses of Job Postings

Surveys were conducted in Spring 2021 and Spring 2022.

In Spring 2021, a survey about the potential MSAP was sent to 77 alumni. Of the 21 who responded, 52% were interested and 24% potentially interested. Six indicated that the PFW Physics Department would be their preferred placed to pursue an MS. The 5 respondents (24%) who were not interested in the MSAP had careers that had either progressed too far already, or moved in a different direction. Besides the 21 who responded to the survey, several others contacted the department separately to inquire about the program. About half of the survey respondents had companies in mind that would likely be interested in hiring graduates of the program and perhaps partnering with it in other ways.

A similar survey was repeated in Spring 2022. It was sent to about 77 alumni & 118 students. Nineteen alumni and nineteen current students replied. The bar chart shows the percentage of alumni or students who answered yes or maybe to questions asking if they may be interested in the MSAP in the near future, or if they would have been interested in the past.

[22] https://www.semiconductors.org/wp-content/uploads/2021/09/2021-SIA-State-of-the-Industry-Report.pdf
[23] https://www.semiconductors.org/wp-content/uploads/2020/10/SIA-Response-RFI-on-National-STEM-Strategy-October-19-2020-.pdf
[24] https://www.semiconductors.org/wp-content/uploads/2021/05/SIA-Impact_May2021-FINAL-May-19-2021_2.pdf
[25] https://www.semiconductors.org/wp-content/uploads/2021/05/SIA-Impact_May2021-FINAL-May-19-2021_2.pdf
[26] https://www.semiconductors.org/wp-content/uploads/2020/10/SIA-Response-RFI-on-National-STEM-Strategy-October-19-2020-.pdf
[27] https://www.borntoengineer.com/become-a-semiconductor-engineer
[28] https://www.purdue.edu/science/careers/what_can_i_do_with_a_major/Career%20Pages/semiconductor_engineer.html
[29] https://www.ziprecruiter.com/e/What-Are-the-Qualifications-to-Get-a-Semiconductor-Job
[30] https://www.semi.org/en/workforce-development/diversity-programs/deloitte-study#_edn9
[31] https://www.fierceelectronics.com/electronics/intel-invests-100m-education-chip-rd-across-us



On May 19, 2021, indeed.com was searched for "applied physics" jobs. There were over 4000 hits with 994 of them having been posted in the previous 14 days. Of the first 100 listings, 53 asked for a PhD. Of the remaining 47 jobs, 21 were science or engineering, 10 were in data science, 4 were connected to biology, and 12 were for internship or other jobs. If the percentages in the first 100 postings are similar to the whole, then we would expect approximately 200 of the national listings on this site in the two weeks before May 19, 2021 to have been in science or engineering and not requiring a PhD.

ii. Letters of Support

Below is a selection of quotes from the surveys of alumni and students. Letters of support for the proposed program can be found in Appendix 2.

"The prospect of being able to go higher in my degree, while remaining local physically, is very appealing"

"I would love to pursue a masters program in physics! It would help me greatly in my current job and help me achieve my future career goals."

"A Masters in applied physics would allow me to continue to learn in the way I want to learn. This department has been amazing in helping students tailor their education to their needs. Whether it be through classes or class projects."

"I currently work at L3Harris, and would be able to have my grad school paid for by my employer. This combined with my desire to go to grad school anyway puts PFW at the crossroads of opportunity and accessibility for me."

"I want a Masters in Physics and I have heard and experienced great things with the PFW Physics department. I think a Masters in Physics would accelerate my career."

"I found that my optics and electronics knowledge that I received from PFW/IPFW was ahead of my fellow students when entering graduate school. If this continues to be the case, I would recommend leaning into the strengths of the department and focusing on optics and electronics."

"Materials is exactly what I would like to pursue! I am currently a materials engineer and would love a masters degree in this."

"My current job hired me specifically because of my Physics BS so I'm sure they would love an MS even more."

3. Cost of and Support for the Program

a. Costs

i. Faculty and Staff

Due to recent attrition, the Purdue Fort Wayne Physics Department has declined from eleven to nine full-time faculty members, one of whom is in a visiting position. We would ask to replace the visiting position with a regular faculty position, and replace the attrition. This would be needed by the 4th year of running the program. As the MSAP program grows, we may seek to employ 3 to 6 students as graduate teaching assistants, which could reduce costs.

ii. Facilities

The Purdue Fort Wayne Physics Department currently has space in both Kettler Hall and the Science Building. We will need to change the lab tables in SB 225 & SB 227. This is to relieve pressure on the two advanced labs in use in Kettler Hall to allow laboratory coursework by the graduate students. The estimated cost of the room renovations is $250,000. This would be needed by the 4th year of running the program.

iii. Other Capital Costs (e.g. Equipment)

The department already has a scanning electron microscope (SEM), an atomic force microscope (AFM), a half-meter spectrometer, an Ocean Optics Flame spectrometer, and an electroforce calibrator to support the materials science research opportunities that will be part of the MSAP. Additional equipment that may be helpful consists of a femto-second laser, a fiber laser, an intensified camera, an x-ray diffractometer, a vapor deposition system, and a newer spectrometer. This equipment is estimated to cost a total of $150K-250K, and would be needed by the 5th year of the MSAP. Undergraduates would also benefit from this equipment.

b. Support

i. Nature of Support (New, Existing, or Reallocated)

The proposed MSAP program uses many courses currently taught in existing programs within the University. Initially, some existing resources (~$3000) will be reassigned to market the MSAP. After the program reaches 10 FTE students, it is expected to be self-sustaining.

In addition, the PFW physics department received a major equipment donation from Wattre Inc. valued at $328K. The equipment was delivered to PFW on 09/29/2023 and is ready to be installed. It will be used to support physics student research. The contract of the donation for the first batch of equipment is attached in appendix 3. Further support is under negotiation.

ii. Special Fees above Baseline Tuition

No special fees above the baseline tuition are required for this program.

4. Similar and Related Programs

a. List of Programs and Degrees Conferred

i. Similar Programs at Other Institutions

There is no MS in Applied Physics in Indiana. Not including graduate physics programs focused on education, or on health or medical physics, there are 5 institutions offering graduate programs in physics with some overlapping areas of interest. Condensed matter physics is closely related to materials science, which is one of the available areas of research in the proposed MSAP.

Institution	Related Graduate Programs
Ball State University[32], Muncie, IN	• MS or MA in Physics with opportunities for research in condensed matter physics, electronic structure of materials & devices, fabrication & characterization of nano-scale devices, medical physics, and more
Indiana University[33], Bloomington, IN	• MS in Physics • MS in Beam Physics & Technology • PhD in Physics • PhD in Astrophysics • PhD in Chemical Physics • PhD in Mathematical Physics • PhD minor in Scientific Computing
Indiana University Purdue University Indianapolis[34], Indianapolis, IN	• MS or PhD in Physics with opportunities for research in biological physics; atomic, molecular, and optical physics; condensed matter physics; and interdisciplinary collaborations with other science and engineering departments, as well as the School of Medicine, and the School of Informatics
Purdue University, West Lafayette, IN	• Materials Engineering Professional Master's Program[35] • Interdisciplinary Master of Science in Engineering, with a major in Microelectronics and Semiconductors[36] • MS in Physics, where most students do it on the way to a PhD, rather than as a final degree[37] • PhD in Physics including research opportunities in Applied Physics; Atomic, Molecular, and Optical Physics; Condensed Matter Physics; • and Quantum Information Science[38]

[32] https://www.bsu.edu/academics/collegesanddepartments/physics-astronomy/academic- programs/ma-ms-physics

[33] https://physics.indiana.edu/graduate/index.html

[34] https://science.iupui.edu/physics/academics/degrees-and-programs/index.html

[35] https://engineering.purdue.edu/MSE/academics/pmp-faqs

[36] https://engineering.purdue.edu/online/programs/masters-degrees/semiconductors

[37] https://www.physics.purdue.edu/academic-programs/graduate/summary-ms.html

[38] https://www.physics.purdue.edu/academic-programs/graduate/index.html

University of Notre Dame, Notre Dame, IN	• PhD in Physics including research opportunities in condensed matter physics[39] • PhD in Physics: Materials Science and Engineering. An interdisciplinary degree in Materials Science and Engineering is offered through any of seven home departments, including the Department of Physics[40,41]

ii. Related Programs at the Proposing Institution

At Purdue Fort Wayne, related programs are a Master of Science in Mathematics, and a Master of Engineering with concentrations in Systems Engineering, Electrical Engineering, or Mechanical Engineering. Neither of these is accredited by the Accreditation Board for Engineering and Technology (ABET)'s Engineering Accreditation Commission. We plan to pursue accreditation for the MSAP through ABET's Applied and Natural Science Accreditation Commission.

b. List of Similar Programs Outside Indiana

Similar programs in Michigan, Ohio, and Illinois are listed below. Only the first three are specifically an MS in Applied Physics.

Institution	Related Graduate Programs
Illinois Institute of Technology, Chicago, IL (~3 hours away)	• MS in Applied Physics[42]
University of Michigan, Ann Arbor, MI (~2.5 hours away)	• MS in Applied Physics—**only for students admitted to the PhD program**, received when they pass the candidacy stage of the PhD process[43] • PhD in Applied Physics[44]
Michigan Technological University, Houghton, MI (~9.5 hours away)	• MS in Applied Physics[45]
Oakland University, Rochester, MI (~3 hours away)	• MS in Physics[46] • PhD in Applied and Computational Physics[47,48,49]
Michigan State University[50], East Lansing, MI (~2 hours away)	• MS in Physics • PhD in Physics
Eastern Michigan University[51], Ypsilanti, MI (~2.5 hours away)	• MS in Physics

[39] https://physics.nd.edu/graduate/
[40] https://science.nd.edu/graduate/materials-science-and-engineering/
[41] https://nano.nd.edu/materials-science/
[42] https://www.iit.edu/academics/programs/applied-physics-ms
[43] https://lsa.umich.edu/appliedphysics/prospectivestudents.html
[44] https://lsa.umich.edu/appliedphysics/prospectivestudents/academic-programs.html
[45] https://www.mtu.edu/gradschool/programs/degrees/applied-physics/
[46] https://oakland.edu/physics/academic-programs/
[47] https://catalog.oakland.edu/programs/descriptions/doctor-of-philosophy-in-applied-and-computational-physics.html
[48] https://catalog.oakland.edu/preview_program.php?catoid=47&poid=8219
[49] https://oakland.edu/grad/graduate-programs/
[50] https://reg.msu.edu/academicprograms/Programs.aspx?PType=GR
[51] https://www.emich.edu/physics-astronomy/programs/graduate.php

Wayne State University[52], Detroit, MI (~2.5 hours away)	• MS in Physics • MA in Physics • PhD in Physics
Miami University[53], Oxford, OH (~2.5 hours away)	• MS in Physics
Ohio State University, Columbus, OH (~3 hours away)	• MS in Materials Science and Engineering[54] • MS in Physics as a Bridge to PhD program, not a terminal degree. • PhD in Physics[55]
Kent State, Kent, OH (~3.5 hours away)	• MS in Materials Science • PhD in Materials Science[56] • MS in Physics • MA in Physics • PhD in Physics[57]
Wright State University, Dayton, OH (~2.5 hours away)	• MS in Physics[58] • Interdisciplinary Applied Science & Mathematics PhD[59]
Northwestern University[60], Evanston, IL (~3.5 hours away)	• MS in Physics • PhD in Physics
Southern Illinois University[61], Carbondale, IL (~6 hours away)	• MS in Physics • PhD in Applied Physics
University of Illinois at Urbana-Champaign, IL (~4 hours away)	• Master of Engineering in Instrumentation and Applied Physics[62] • MS in Physics—only for students seeking a PhD [63] • PhD in Physics[64]

[52] https://clas.wayne.edu/physics/programs
[53] https://miamioh.edu/cas/academics/departments/physics/academics/graduate-program/index.html
[54] https://gpadmissions.osu.edu/programs/program.aspx?prog=0130
[55] https://physics.osu.edu/graduate-student-home-page/prospective-students/graduate-admissions- how-apply
[56] https://www.kent.edu/materials-science/ms-phd-materials-science
[57] https://www.kent.edu/physics/graduate-study-phd-physics-program
[58] https://science-math.wright.edu/physics/master-of-science-in-physics
[59] https://www.wright.edu/degrees-and-programs/profile/interdisciplinary-applied-science-mathematics
[60] https://www.tgs.northwestern.edu/admission/academic-programs/explore-programs/physics.html
[61] https://physics.siu.edu/graduate/program-discriptions.php
[62] https://physics.illinois.edu/academics
[63] https://physics.illinois.edu/academics/graduates/ms-degree-requirements
[64] https://physics.illinois.edu/academics/graduates

Similar programs offered online are listed below.

Institution	Related Graduate Programs
Johns Hopkins University	• Online Part Time Applied Physics Master's Degree[65]
University of Central Florida	• Online MS in Optics and Photonics[66]
Arizona State University	• Online MS in Materials Science and Engineering[67]

c. Collaboration with Similar or Related Programs on Other Campuses

No plans are currently in place to collaborate with similar or related programs on other campuses.

d. Articulation of Associate/Baccalaureate Programs

Not applicable.

5. Quality and Other Aspects of the Program

a. Credit Hours Required / Time to Completion

The proposed MSAP will require at least 30 credit hours for students who enter with a BS in Physics. With 9 credits per semester a full-time student can finish in three semesters plus a summer for the capstone project. Part time students or those missing prerequisites will take longer. A part time student who takes 6 credits per semester and 3 credits in summer can finish the degree in two years. Sample curricula are provided in Appendix 4.

b. Exceeding the Standard Expectation of Credit Hours

The proposed MSAP does not exceed the standard 30 credit hour limit.

c. Program Competencies or Learning Outcomes

The following outcomes include those required by the Accreditation Board for Engineering and Technology (ABET):

1. An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.
2. An ability to formulate or design a system, process, procedure or program to meet desired needs.
3. An ability to conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.
4. An ability to communicate effectively with a range of audiences.
5. An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.
6. An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.
7. An ability to use and critically evaluate current technical/scientific research literature, online information, or information related to scientific issues in the mass media.
8. Demonstrate the role of physics in industry and/or entrepreneurism.
9. Demonstrate mastery of basic physics.

[65] https://ep.jhu.edu/programs/applied-physics/masters-degree-requirements/

[66] https://www.ucf.edu/online/degree/optics-and-photonics-ms/

[67] https://asuonline.asu.edu/online-degree-programs/graduate/master-science-materials-science-and-engineering/

d. Assessment

Tentative ideas for assessing learning outcomes, formulated after consultation with PFW's executive director for assessment and program review, are as follows:

	Learning Outcome	Assessment Method
1.	An ability to identify, formulate, and solve broadly defined technical or scientific problems by applying knowledge of mathematics and science and/or technical topics to areas relevant to the discipline.	Projects in any graduate level physics course except Phys 59000
2.	An ability to formulate or design a system, process, procedure or program to meet desired needs.	Projects in Phys 51100, 52200, 52400, 52500, 53600, 57000
3.	An ability to conduct experiments or test hypotheses, analyze and interpret data and use scientific judgment to draw conclusions.	Projects in Phys 52200, 52400, 52500, 53600
4.	An ability to communicate effectively with a range of audiences.	Oral presentation about capstone project
5.	An ability to understand ethical and professional responsibilities and the impact of technical and/or scientific solutions in global, economic, environmental, and societal contexts.	Targeted assignments embedded in courses
6.	An ability to function effectively on teams that establish goals, plan tasks, meet deadlines, and analyze risk and uncertainty.	Capstone and/or projects in Phys 52400, 53600. A journal reflecting on their team participation may be required.
7.	An ability to use and critically evaluate current technical/scientific research literature, online information, or information related to scientific issues in the mass media.	Writing about capstone, including a review of background literature on the topic
8.	Demonstrate the role of physics in industry and/or entrepreneurism.	Capstone
9.	Demonstrate mastery of basic physics.	$\geq$ B- in required courses

Students will be encouraged to keep a portfolio of any projects they do, and to include reflections about their role on any team projects. Special attention will have to be paid to Outcome 5. Assignments requiring students to consider ethics need to be embedded in MSAP courses. Examples include the responsibility to overdesign nuclear power plants, or to consider the environmental impacts of byproducts of production, or end of life disposal of products.

e. Licensure and Certification

i. State License: No state licenses apply to this program.

ii. National Professional Certifications (including the bodies issuing the certification): No professional certifications apply to this program.

iii. Third-Party Industry Certifications (including the bodies issuing the certification): No third-party industry certifications apply to this program.

f. Placement of Graduates

Most of the graduates of the MSAP program are expected to work in various engineering, research and development, or science positions, especially those involving an understanding of

optics, electronics, materials, or acoustics. It is expected that some students pursuing the MSAP will be sponsored by their employers. Others who are not planning to continue on to a PhD program will be encouraged to work in industry during their studies, with the help of either PFW Career Services, or through the Physics Department's connections to its alumni and area businesses.

Alumni of the MSAP program may also pursue admission into PhD programs in physics, materials science, optics, or engineering, especially electrical, mechanical, or systems engineering.

g. Accreditation

To increase the attractiveness of the program for both students and employers, the MSAP program has been designed with an eye towards pursuing accreditation from the Accreditation Board for Engineering and Technology (ABET). We must have at least one graduate before applying for accreditation, after which the process takes another 18 months to complete. Therefore, accreditation is not expected until about 4 years after inception.

6. Projected Headcount and FTE Enrollment and Degrees Conferred

Below is the projected enrollment. The prediction was based on current enrollment trends in both undergraduate and MS programs at PFW. PFW Engineering, Math and CS have a MS/undergraduate ratio of 5.3%, 21.8%, and 44% respectively (in 2022). Approximately 17% of physics majors who graduated in the most recent ten years went to graduate school within a year of graduation. Three 2023 physics graduates have already been accepted to graduate schools. This was used as the basis for the enrollment projection for the first year of the MSAP, which will have limited lead time for marketing. The number of our undergraduate majors has been kept at an annualized growth rate of 6% over the past two decades (from 19 in 2002 to 67 in 2022, and projected to be 92 in 2027.) The percentage of students interested in MS program was assumed to be constant at 17%

	Year # 1	Year # 2	Year # 3	Year # 4	Year # 5
Projections:	FY 2025	FY2026	FY 2027	FY 2028	FY 2029
Full-time	2	3	5	7	10
Part-time		2	3	5	6
Total Headcount	2	5	8	12	16
Enrollment (FTE)	2	4	7	10	14
Degree Completions	0	2	3	7	10

Appendix 1: Indiana DWD and US Department of Labor Data

Data from Indiana's Department of Workforce Development (IN DWD) is presented for two broad categories of fields: physical science in the first table and engineering in the second table. The engineering occupations listed have been chosen based on the job titles and graduates programs our alumni have pursued. There are higher absolute numbers of engineering jobs, but generally lower projected growth rates. Included is data for the state as a whole, and for our area: Allen County & Region 3.

Our area has low Location Quotients. "Location quotient (LQ) is a way of quantifying how concentrated a particular occupation is in a region compared to the nation. "[68] Location Quotients for the physical science fields in our area are approximately 0.2, while for materials, electrical, and mechanical engineering, they are approximately 1.5. An LQ significantly less than 1.0 may indicate an opportunity to develop businesses in the local area to meet area demand."[69] A location quotient greater than 1.25 might indicate the region is an exporter.[70] The Automation Indices are less than 100 for both physical science and engineering fields, indicating a below average risk of automation.[71] They are a bit lower for the physical science fields than engineering.

Table for Physical Sciences with data from the Indiana Department of Workforce Development[72]:

Occupation -- Automation Index	County	Current Employment (2018)	% Growth (2018 to 2028)	Annual Openings	Location Quotient
Physicists – 72.8	Allen	4	25.0	1	0.18
	Region 3	8	12.5	1	0.17
	Indiana	267	10.1	25	0.70
Physical Scientists, All Other – 76.4	Allen	7	28.6	1	0.24
	Region 3	14	21.4	2	0.25
	Indiana	176	11.4	17	0.36
Materials Scientists – 74.2	Allen	3	0.0	0	0.26
	Region 3	9	0.0	1	0.41
	Indiana	282	2.8	27	1.55

[68] https://datavizpublic.in.gov/views/EMSIOccupationSnapshot/EmsiOccupationSnapshot?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no

[34] http://www.incontext.indiana.edu/2006/march/1.asp

[35] http://www.incontext.indiana.edu/2006/march/1.asp

[71] https://datavizpublic.in.gov/views/EMSIOccupationSnapshot/EmsiOccupationSnapshot?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no

[72] https://datavizpublic.in.gov/views/EMSIOccupationSnapshot/EmsiOccupationSnapshot?iframeSizeToWindow=true&:embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no

Table for Engineering with data from the Indiana Department of Workforce Development[73]:

Occupation -- Automation Index	County	Current Employment (2018)	% Growth (2018 to 2028)	Annual Openings	Location Quotient
Materials Engineers -- 87.3	Allen	56	1.8	4	1.50
	Region 3	105	2.9	8	1.48
	Indiana	968	-1.9	72	1.58
Nuclear Engineers – 75.7	Allen	9	0.0	1	0.33
	Region 3	38	0.0	3	0.73
	Indiana	166	7.8	15	0.37
Electronics Engineers, Except Computer – 85.4	Allen	158	-23.4	9	0.87
	Region 3	287	-14.3	18	0.84
	Indiana	2393	4.8	178	0.81
Electrical Engineers – 84.8	Allen	369	-8.9	22	1.52
	Region 3	547	-4.6	36	1.20
	Indiana	3296	8.0	250	0.84
Aerospace Engineers – 77.2	Allen	25	-28.0	1	0.28
	Region 3	37	-13.5	2	0.22
	Indiana	549	5.5	38	0.37
Mechanical Engineers – 83.4	Allen	577	0.3	37	1.50
	Region 3	1012	6.5	73	1.40
	Indiana	8148	9.5	617	1.30
Engineers, All Other – 88.2	Allen	204	2.9	14	1.02
	Region 3	313	4.5	22	0.83
	Indiana	2466	8.3	185	0.76

Below is data for Indiana and for the nation from the US Department of Labor, and the US Bureau of Labor Statistics. As mentioned previously, because of having a projected growth rate of 8% for the nation, Physicist is on a list of "Bright Outlook" occupations.[74]

[73] https://datavizpublic.in.gov/views/EMSIOccupationSnapshot/EmsiOccupationSnapshot?iframeSizedToWindow=true&:embed=y&:showAppBanner=false&:display_count=no&:showVizHome=no

[74] https://www.onetonline.org/find/bright?b=1

Table with data from the US Department of Labor, and the US Bureau of Labor Statistics:

Occupation Title	Employment IN 2020 [75] / US 2021 [76]	Projected Employment IN 2030 / US 2031	Projected Annual Openings IN 2020-30 / US 2021-31	Projected Percent Change IN 20-30 / US 21-31
Physicists * Fluid Dynamicist* Health Physicist* Mathematical Physicist* Medical Physicist* Molecular Physicist* Nuclear Physicist* Optical Scientist* Research Physicist* Rheologist* Thermodynamic Physicist* Thermodynamicist	180 / 23,000	190 / 24,800	10 / 1,900	6.0 / 8.2
Materials scientists * Materials Scientist* Metal Alloy Scientist* Plastics Scientist	800 / 7,000	840 / 7,400	80 / 600	5.0 / 6.0
Materials engineers * Automotive Sheet Metal Engineer* Ceramic Engineer* Forensic Materials Engineer* Glass Science Engineer* Metallographer* Metallurgical Engineer* Metallurgist* Welding Engineer	590 / 22,100	660 / 23,400	40 / 1,700	12.0 / 6.1
Engineers, all other * Corrosion Control Engineer* Mathematical Engineer* Optical Engineer* Ordnance Engineer* Photonics Engineer* Salvage Engineer	3,150 / 168,600	3,320 / 168,600	220 / 10,800	5.0 / 0.0
Bioengineers and biomedical engineers * Bio-Mechanical Engineer* Biochemical Engineer* Biomaterials Engineer* Biomedical Engineer* Dialysis Engineer* Genetic Engineer	960 / 17,900	1040 / 19,700	70 / 1,200	8.0 / 9.8
Biochemists and biophysicists * Biochemist* Biological Chemist* Biophysicist* Clinical Biochemist* Physical Biochemist	510 / 37,500	540 / 43,200	50 / 4,000	6.0 / 15.3

[75] https://www.onetonline.org/
[76] https://data.bls.gov/projections/occupationProj

Appendix 2: Letters of Support

Letters of support from local professionals are included below.

ULTRA MARITIME

Ultra Maritime US
4868 East Park 30 Drive
Columbia City. IN 46725

T (260) 248-3500
ultra.group/maritime

February 6, 2023

Chris Lowery
Commissioner for Higher Education
Indiana Commission for Higher Education
101 West Ohio Street, Suite 300
Indianapolis, IN 46204-4206

Dear Commissioner Lowery,

I am writing to express my strong support for the proposed Master of Science in Applied Physics graduate program. Based on my experience and knowledge in the engineering field, I am confident that this program will make a significant contribution to the industry, just like its Bachelor of Science program which has already contributed six engineers to Ultra Maritime (USSI) in Columbia City. Each one has been a valued asset with strong analytical thinking, interdisciplinary understanding, and practical skills that quickly integrate them into any team across any discipline.

The program has been carefully designed to meet the needs of the industry and to provide students with the skills and knowledge necessary to succeed in engineering. The curriculum covers a wide range of topics, including biomedical physics, optoelectronics and photonics, engineering physics, computational/mathematical physics, materials science, and astrophysics, which will give students a comprehensive understanding of the field. Additionally, the program's focus on research-informed educational approaches has a proven track record of equipping graduates with the skills to succeed in industry, setting it apart from other programs and providing students with a competitive advantage in the job market.

The program is also well-equipped with highly qualified and experienced faculty members who are leaders in their respective fields. They bring a wealth of knowledge and expertise to the program, which will greatly benefit students. The faculty members have a proven track record of conducting cutting-edge research in Optoelectronics, Materials Science, and Acoustics and providing high-quality, student-first education that builds skills both inside and outside of the classroom.

In conclusion, I believe that the proposed Master of Science in Applied Physics graduate program has the potential to become one of the leading programs in the field, and I strongly recommend its approval. I am confident that it will have a positive impact on the field and on the students who enroll in the program.

Thank you for considering my recommendation.

Sincerely,

John Fehring

Director of Engineering, Sonobuoy Systems
T: +1 260 248 3616
E: john.fehring@ultra-ussi.com

Chris Lowery
Commissioner for Higher Education
Indiana Commission for Higher Education
101 West Ohio Street, Suite 300
Indianapolis, IN 46204-4206

February 17th, 2023

Dear Commissioner Lowery,

I strongly support Purdue Fort Wayne Physics Department's proposal to create a Master of Science in Applied Physics. Since I've graduated back in 2018 I have had the pleasure of working with many team members who are also physics alumni. They have been valuable contributors with strong analytical thinking, interdisciplinary understanding, and practical skills. This can be seen in the wide variety of roles that we have taken after graduation. This is just a few names of (I)PFW Physics Alumni to show the variety of roles we have been able to fill. I have personally worked with everyone on this list at Ultra and L3Harris.

Evan - Senior Associate Systems Engineer
Maryanne - Senior Associate Acoustics Engineer
Todd - Senior Specialist Electrical Design Engineer
Blaine - Specialist Electrical Test Engineer
Andrew - Senior Associate Optical Engineer
Yioti - Senior Associate Integration and Test Engineer
Nick - Senior Associate Mechanical Engineer
Michael - Senior Associate Software Engineer
Matt - Senior Supervisor Systems Engineer

As you can see, there really isn't a role we have yet to tackle as physics majors. That's just to say that a physics degree, especially from PFW, is a force to reckon with. The opportunity to advance our education with possibly courses in this new and exciting program such as Interferometry, Coherent Optics, Radiometry, Instrumentation, Experimental Testing and Modeling of Acoustics and Vibrations, in addition to the capstone project will further enhance graduates of the program with knowledge and skills that will be valuable to the companies we work for. In our industries we are creating leading edge technology surrounding the defense and exploration of space, land, air, and sea. I highly encourage you to approve this proposal so that we may tackle yet another exciting challenge.

Sincerely,

Cy Bentley
Senior Associate Electrical Design Engineer
Space & Airborne Systems / L3Harris Technologies
Cell: 260-599-4445
1919 W. Cook Road / Fort Wayne, IN 46818

Appendix 3: PFW In-kind gift form

PURDUE UNIVERSITY. FORT WAYNE

Purdue Fort Wayne
In-Kind Gift Form for use with Donor

This document recognizes a Gift in Kind to Purdue Fort Wayne (PFW) from:

Donor(s): WATTRE INC MR Curt Graber

Contact (if business or organization): MR Curt Graber

Address: 9301 Roberts Rd City: Woodburn State: IN Zip: 46797

Primary Phone: 260-403-2682 ☒ Mobile ☐ Home ☐ Business

Secondary Phone: 260-657-3701 ☐ Mobile ☐ Home ☒ Business

Email(s): Curt@Wattre.com

Were goods or services provided in exchange for the gift? Yes ☐ No ☒

If yes, describe: _____

Description of the item(s) gifted: (if equipment include model and serial number) ☐ New ☒ Used (Age) _____

Contents of Laser and optics Lab, test and measurement gear

Purpose or use for PFW: In Support of teaching and Student Activities

Will the item(s) be used at a Silent Auction for the benefit of PFW? ☒ No ☐ Yes ____ Name of fundraiser _____

Date Received on Campus: _____ By: (PFW Department or Person) _____

The Fair Market Value (FMV) of the Gift in Kind is: $ 125,000.00

The FMV must be provided by the donor and include written documentation from the donor or third party appraiser, i.e., appraisal, itemized inventory list, invoice, receipt, letter, published value (catalog, website printout).

Your signature below indicates the intent to transfer all ownership rights in the above described property to Purdue University Fort Wayne.

DONOR SIGNATURE(S): _____ **DATE:** 9-21-23

Gifts in Kind must be approved by the Chief Development Officer to ensure the university desires to have and can appropriately use the gift being offered.

PFW APPROVAL: _____ **DATE:** _____

BJ Hull, Chief Development Officer

Note: if donor will be requesting the University to sign an I.R.S. Form 8283 and the gift is $5,000 or more, it is an I.R.S. requirement that the donor MUST provide a third party appraisal to PFW.

OFFICE OF DEVELOPMENT AND ALUMNI RELATIONS | 2101 EAST COLISEUM BOULEVARD | FORT WAYNE, INDIANA, 46805-1499

o: 260-481-6082 | development@pfw.edu | pfw.edu/development | EA/EOE

Appendix 4: Curriculum & Requirements, Detail

The Master of Science in Applied Physics (MSAP) will have opportunities for research or coursework in opto-electronics, materials science, & acoustics.

Admission Requirements

BS in Physics, Chemistry, Engineering, Mathematics, or closely related fields.
GPA of 2.5 or higher. Applicants must submit transcripts, a statement of intent, and references.

Curriculum Requirements

The Master of Science in Applied Physics consists of at least 30 credit hours, with a 3.0 GPA. Transfer credits are subject to Purdue University Graduate School policies, which include allowance of a maximum of 6 credits at the 300 or 400 level with grade of B- or higher, upon the recommendation of the physics department graduate committee. This makes the program more accessible to those with non-physics bachelor's degrees by allowing them to fill any necessary gaps in their background.

The required capstone project can be done as a thesis if the student wants a thesis degree or for a course grade if the student wants the non-thesis degree option.

Required Core—At least 3 of the following courses: (9-10 credits)

Phys 51000 Physical Mechanics	(4 credits)
Phys 51500 Thermal and Statistical Physics	(3 credits)
Phys 53000 Electricity & Magnetism	(3 credits)
Phys 55000 Introduction to Quantum Mechanics	(3 credits)

Research—6 credits:

Non Thesis Degree:

Phys 59000 Reading and Research (Required Capstone)	(2 x 3 credits)

Thesis Degree:

Phys 69800 Thesis Research (Required Capstone)	(2 x 3 credits)

Electives—remaining from any combination of Categories 1 & 2 below: (15 credits)
Category 1: Graduate courses offered by the Physics Department, including up to three additional credits in research course (Phys 59000). The Physics Department currently offers 42 credits of graduate courses, including Phys 57000: Selected Topic in Physics, which can address a variety of topics.

Category 2: Maximum of 9 other graduate credits approved by the physics department graduate committee as a coherent plan of study.

This particularly benefits to students with a background in closely related fields, such as Math, Engineering, or Chemistry. Since physics is a fundamental science with a huge diversity of application in other fields, the MSAP encourages students to focus on their long-term career when they form a study plan. Graduate courses from other departments can be beneficial when such students apply their physics knowledge to their field. The selection of the non-physics courses must be coherent with the physics electives. The physics department graduate committee will review and approve the plan before out of department courses are taken. Two examples are described below.

Example 1: A student focused on optical communications
Two electric engineering graduate courses (6 credits from category 2), along with Phys 51100 (Laser Physics), Phys 52400 (Physical Optics & Experimental Spectroscopy), and Phys 52200 (Coherent Optics & Quantum Electronics) (10 credits from category 1)

Example 2: A student with interest in computational structural material sciences careers Two Math graduate courses (6 credits from category 2), along with Phys 52000 (Mathematical Physics), Phys 54500 (Solid State Physics), and Phys 52500 (Fundamental Application of Neural Networks) (9 credits from category 1)

Sample Curriculum 1: Two-Year Study Plan with Thesis Option:

A sample curriculum for a thesis option student is provided below.

Year 1 of Two-Year Plan, Thesis Option					
Fall			Spring		
Course No.	Course Title	Cr	Course No.	Course Title	Cr
Phys 51500	Thermal & Statistical Physics (Core Course 1)	3	Phys 51000	Physical Mechanics (Core Course 2)	4
Phys 52200	Coherent Optics & Quantum Electronics (Elective 1)	3	Phys 53000	Electricity & Magnetism (Core Course 3)	3
Phys 52000	Mathematical Physics (Elective 2)	3	-------	----------	
Total Semester Credit Hours:		9	Total Semester Credit Hours:		7

Year 2 of Two-Year Plan, Thesis Option					
Fall			Spring		
Course No.	Course Title	Cr	Course No.	Course Title	Cr
Phys 55000	Introduction to Quantum Mechanics (Elective 3)	3	Phys 52400	Physical Optics & Experimental Spectroscopy (Elective 5)	4
Phys 51100	Laser Physics (Elective 4)	3	Phys 69800	Thesis Research	3
Phys 69800	Thesis Research	3	-------	----------	
Total Semester Credit Hours:		9	Total Semester Credit Hours:		7

Sample Curriculum 2: Two-Year Study Plan with Non-Thesis Option:

A sample curriculum for a non-thesis student (who happens to have a background and interests in Engineering) is provided below.

Year 1 of Two-Year Plan, Non-Thesis Option					
Fall			Spring		
Course No.	Course Title	Cr	Course No.	Course Title	Cr
Phys 51500	Thermal & Statistical Physics (Core Course 1)	3	Phys 53000	Electricity & Magnetism (Core Course 2)	3
ECE 5xx00	Elective 1 (Category 2 Course, pre-approved by the committee)	3	Phys 53600	Electronic Techniques for Research (Elective 2)	4
Phys 59000	Reading & Research	2	-------	----------	
Total Semester Credit Hours:		8	Total Semester Credit Hours:		7

Year 2 of Two-Year Plan, Non-Thesis Option					
Fall			Spring		
Course No.	Course Title	Cr	Course No.	Course Title	Cr
Phys 55000	Introduction to Quantum Mechanics (Core Course 3)	3	Phys 52200	Coherent Optics & Quantum Electronics (Elective 4)	3
Phys 51100	Laser Physics (Elective 3)	3	ECE 5xx00	Elective 5 (Category 2 Course, pre-approved by the committee)	3
Phys 59000	Reading & Research	2	Phys 59000	Reading & Research	2
Total Semester Credit Hours:		8	Total Semester Credit Hours:		8

Sample Curriculum 3 for a Part-time Graduate Student

A sample curriculum for a part-time student is provided below. We assume this student has a full-time job and only takes evening classes. This limits them to two courses per semester. (Most of the graduate classes are on Monday/Wednesday or Tuesday/Thursday late afternoon/early evening patterns. This allows students to take two classes if he/she is willing to take classes on four evenings.) If the student also takes summer classes, they can still finish the MSAP in two years. The student will be able to finish the minimal requirement for the degree with 31 credit hours. A student only taking one course each semester, or not taking summer classes, would take longer to finish the degree. That would be a less common case and we do not have a detailed sample schedule since the schedule would be more individualized.

Year 1—Part-time Student								
Fall			Spring			Summer		
Course No.	Course Title	Cr	Course No.	Course Title	Cr	Course No.	Course Title	Cr
Phys 51500	Thermal & Statistical Physics (Core Course 1)	3	Phys 51000	Physical Mechanics (Core Course 2)	4	MA 52100	Intro Optimization (Elective 2, Category 2)	3
Phys 52000	Mathematical Physics (Elective 1)	3	Phys 53000	Electricity & Magnetism (Core Course 3)	3	-------	----------	
Total Semester Credit Hours:		6	Total Semester Credit Hours:		7	Total Semester Credit Hours:		3

Year 2—Part-time Student								
Fall			Spring			Summer		
Course No.	Course Title	Cr	Course No.	Course Title	Cr	Course No.	Course Title	Cr
Phys 55000	Intro. to Quantum Mechanics (Elective 3)	3	Phys 57000	Selected Topics: Nano-Systems (Elective 5)	3	Phys 59000	Reading & Research	3
Phys 54500	Solid State Physics (Elective 4)	3	Phys 59000	Reading & Research	3	-------	----------	
Total Semester Credit Hours:		6	Total Semester Credit Hours:		6	Total Semester Credit Hours:		3

Existing courses in the proposed curriculum already offered regularly:

Cross-listed as dual-level with corresponding undergraduate course	**Stand alone, serving physics undergrads, and graduate students from other departments, such as Math & Electrical Engineering**
Phys 51000 Physical Mechanics (4 credits)	Phys 51100 Laser Physics (3 credits)
Phys 51500 Thermal & Statistical Physics (3 credits)	Phys 52200 Coherent Optics and Quantum Electronics (3 credits)
Phys 52000 Mathematical Physics (3 credits)	Phys 52400 Physical Optics and Experimental Spectroscopy (4 credits)
Phys 53000 Electricity and Magnetism (3 credits)	Phys 52500 Fundamental application of Neural Networks (3 credits)
Phys 55000 Introduction to Quantum Mechanics (3 credits)	Phys 54500 Solid State Physics (3 credits)
	Phys 53600 Electronic Techniques for Research (4 credits)

Existing courses in the proposed curriculum not already offered regularly:

Phys 57000 Selected Topics in Physics(3 credits)-- topics including, but not limited to: Condensed Matter Physics; Nanosystems; Quantum Materials and Devices.

Phys 59000 Reading and Research (1-3 credits)

As MSAP enrollment grows, we predict being able to offer all graduate classes stand-alone in year 3. Even during the starting year of the program when enrollment has yet to reach the stand-alone level, graduate students will be assigned more difficult coursework to match the desired rigor. In physics, we study similar topics at a wide variety of complexities. For example, we offer Mechanics at 4 different levels: algebra based (Phys22000), calculus based (Phys15200), Hamiltonian based (Phys31000), and analytic based (Phys51000). During the transition period where the graduate courses are offered at dual level, graduate students and undergraduate

students working on the same problem will have different requirements in their mathematical methods, complexity of the modeling, and level of details.

New courses to be added for the proposed curriculum:

Phys 69800 Thesis Research (1-3 credits)

Appendix 5: PFW Department of Physics Faculty, Detail

Last name	First name	Academic Title	Diploma Information	Specialization Interests
Faramarzi	Shamsolzaman (Homeira)	Visiting Assistant Professor of Physics	PhD in Physics, Tehran Polytechnic, 2006	Applied Physics, Atomic & Molecular Physics, Fabrication of Nanomaterials by Laser-based Technology, Optical Properties of Nanomaterials, Medical applications of Nanomaterials
Grove	Timothy	Associate Professor of Physics	Ph.D. in Physics, The University of Connecticut, 1994	Atomic, Molecular, and Optical Physics; Spectroscopy; Acoustics; Advanced Undergraduate Educational Lab
Johnson	Merrell	Associate Professor of Physics	Ph.D. in Physics, Purdue University, Indianapolis, 2011	Soft Materials; Thin Films; Nanoparticles; Biophysics; Characterization techniques from x-ray scattering to scanning probe microscopy
Maloney	David	Professor of Physics	Ph.D. interdisciplinary in Physics, Geology, & Education, Ohio University, 1975	Physics Education Research
Masters	Mark	Professor of Physics	Ph.D. in Physics, Lehigh University, 1990	Applied Physics; Atomic, Molecular and Optical Physics; LASERS; Quantum Optics; Electro-Optics; Materials (aerogels in particular); Imaging (especially medical); Acoustics
Mikhail	Salam	Clinical Assistant Professor of Physics	Ph.D. in Physics, The Ohio State University, 2011	Nonlinear Dynamics; Fluids

Ursino	Eugenio	Assistant Professor of Physics	Ph.D. in Physics, University of Miami, 2007	Astrophysics, Diffuse X-ray Background, Large Scale Structure
Wang	Gang	Associate Professor	Ph.D. in Physics, Northwestern University, 2003	Optics/Optical Sciences. Optical Physics & Materials Science: Nonlinear Optical Materials; Laser Physics; Optically Assisted Assembly of Nanomaterials; Microscopy; Nonlinear Optical Thin Films, Colloidal materials.
Waly	Noha	Lecturer	Ph.D. in Physical Chemistry, University of Heidelberg, Germany, 2011	Synthesis of Metal Nanoparticles, and Control of their Optical Properties

Appendix 6: Library Memo

A memo from the PFW library is included on the next page.

The $25,000 to $30,000 materials costs mentioned would be needed in advance of applying for ABET accreditation. We cannot apply for ABET accreditation until there is at least one graduate, after the 2nd year of the program.

Further conversation with the Librarian indicated that when the program reached 20 FTE, the library would see the marked increase in services needed, such as document deliveries and consultations. The projection for when the program would reach 20 FTE is after the fifth year.

Liaison Librarian Memo

Date: 2/13/23

From: Sarah Wagner, Information Services and Instruction Librarian

To: Dr. Carl N. Drummond, Vice Chancellor for Academic Affairs

Re: MS in Applied Physics

Describe availability of library resources to support proposed new program:

Helmke Library has limited existing resources for applied physics. In addition to having few books and reference materials (print and electronic), the most notable gap is in full-text coverage of the key journals in the subject area. To support this program for accreditation, the library needs $25,000 to $30,000 for journal subscriptions and other materials. Without these subscriptions, I do not believe the library would meet the benchmark of "adequate" for ABET accreditation.

Comments:

I anticipate the addition of this program would also increase the use of Document Delivery Services (DDS), a service already being leaned on to support essential library functions. Obtaining materials via DDS, particularly more recent publications, comes with the cost of both staff time and money in the form of copyright fees. Depending on enrollment, there may also be a marked increase in the support needed from the liaison librarian, a commitment which would be difficult to meet with current staffing levels.

Sarah Wagner 2-13-2023

Liaison Librarian Signature *Date*

Table 1
Program Financial Projection

Financial Office Table
Purdue FTW Campus
Masters of Science in Applied Physics

	Year #1 FY 2025	Year #2 FY 2026	Year #3 FY 2027	Year #4 FY 2028	Year #5 FY 2029
I. ENROLLMENT					
1. Program Credit Hours Generated (FTE * 30 for BS & FTE * 24 for masters/graduate)					
a. Existing Courses	48	120	162	194	246
b. New Courses				36	90
Total	**48**	**120**	**162**	**230**	**336**
2. Full-Time Equivalents (FTE)					
a. Full-Time FTEs	2	3	5	7	10
b. Part-Time FTEs		1	2	3	4
Total Full/Part-Time FTE	**2**	**4**	**7**	**10**	**14**
c. On-Campus Transfer FTEs					
d. New-to-Campus FTEs	2	4	7	10	14
Total On/New-to-Campus FTE	**2**	**4**	**7**	**10**	**14**
3. Program Majors - Headcount					
a. Full-Time Students	2	3	5	7	10
b. Part-Time Students		2	3	5	6
Total Full/Part-Time HC	**2**	**5**	**8**	**12**	**16**
c. In-State	2	4	6	10	13
d. Out-of-State		1	2	2	3
Total In/Out of State HC	**2**	**5**	**8**	**12**	**16**

Notes

For both undergraduate and graduate degree enrollment projections, please carefully consider competitive degree enrollments and how the Purdue program will be marketed in the calculation of enrollment and degree completion projections.

^ Enter footnotes in the last section of this table for to provide additional details (required for 'other' categories) and projection and/or calculation logic.

Table 1
Program Financial Projection

Financial Office Table
Purdue FTW Campus
Masters of Science in Applied Physics

	Year #1 FY 2025	Year #2 FY 2026	Year #3 FY 2027	Year #4 FY 2028	Year #5 FY 2029
II. INCREMENTAL REVENUE					
1. Projected # of *New* Students [1]	2	4	7	10	14
2. General Tuition & Fees [2][3]					
a. General Service					
b. Technology Fee					
c. Repair & Rehabilitation Fee					
d. Student Fitness & Wellness Fee					
e. Student Activity Fee	8,862	11,260	11,181	11,181	11,181
Total General Service T&F	**$ 8,862**	**$ 11,260**	**$ 11,181**	**$ 11,181**	**$ 11,181**
2. Additional Fees - *if applicable* [4]					
a. Differential Fees					
b. Course Fees					
c. Other Fees					
Total Additional Fees	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Total Incremental Revenue	**$ 17,724**	**$ 45,041**	**$ 78,268**	**$ 111,811**	**$ 156,536**

Notes

(1) New Students represents the anticipated number of *new* students to campus; transfers or existing students are ***not*** to be included. The Total is set equal to the 'New-to-Campus FTEs' completed in the Enrollment section (I2d).

(2) T&F must match approved Bursar rates (refer to Bursar website). The calculation should be based on the ***Full-Time/ Resident*** Student T&F. If the new degree program is primarily Part-Time students, then the T&F needs to be adjusted appropriately for this type of expected enrollment.

(3) This data assists in answering (Q3bi): Nature of Support.

(4) If additional fees are applicable, then each fee must be individually listed above and match approved Bursar rates (refer to Bursar website).

Bursar T&F Website: https://www.pfw.edu/offices/bursar-office/tuition-fees/

^ Enter footnotes in the last section of this table for to provide additional details (required for 'other' categories) and projection and/or calculation logic.

Table 1
Program Financial Projection

Financial Office Table

Purdue FTW Campus
Masters of Science in Applied Physics

	Year #1 FY 2025		Year #2 FY 2026		Year #3 FY 2027		Year #4 FY 2028		Year #5 FY 2029	
III. EXPENDITURES (Question #3A)										
1. Salary and Wages	**FTE**	**Cost**	**FTE**	**Cost**	**FTE**	**Cost**	**FTE**	**Cost**	**FTE**	**Cost**
a. Faculty	0.33	-	-0.17	(13,240)	-0.67	(52,960)	-0.42	(33,365)	-0.17	(13,240)
b. Limited Term Lecturers										
c. Graduate Students			0.50	14,069	1.00	28,138	1.00	28,138	1.00	28,138
d. Other (Post Doc/Staff)										
Total S&W	**0.33**	**$ -**	**0.33**	**$ 829**	**0.33**	**$ (24,822)**	**0.58**	**$ (5,227)**	**0.83**	**$ 14,898**
2. Fringes and Fee Remissions										
a. Fringe Benefits		-		(4,634)		(18,536)		(11,678)		(4,634)
b. Fee Remissions			1	8,582	1	17,005	1	17,005	1	17,005
Total FB & FR		**$ -**		**$ 3,948**		**$ (1,531)**		**$ 5,327**		**$ 12,371**
3. Supplies and Expenses										
a. General Supplies & Expenses										
b. Minor Equipment										
c. Recruiting & Marketing		3,000								
d. Travel & Entertainment										
e. Other (Library, subscriptions, IT)				25,000						
Total Supplies and Expense		**$ 3,000**		**$ 25,000**		**$ -**		**$ -**		**$ -**
4. Capital										
a. Capitalized Equipment										20,000
b. Repair & Replacement								50,000		50,000
Total Equipment		**$ -**		**$ -**		**$ -**		**$ 50,000**		**$ 70,000**
Total Expenditures		**$ 3,000**		**$ 29,777**		**$ (26,353)**		**$ 50,100**		**$ 97,269**
Projected Program Surplus/(Deficit)*		**$ 14,724**		**$ 15,265**		**$ 104,621**		**$ 61,711**		**$ 59,267**

***** For the CHE proposal, only identify the nature of the support. It is not necessary to note dollars in the report; however, it should be stated that there is sufficient revenue to cover expenses. Projected surplus/deficit is an aid to identify potential new University revenue, anticipated program costs, and degree substantiality. This does not represent any type of funding request.

Table 2
Program Revenue and Expenditure Summary

Board of Trustees Table
Purdue FTW Campus
Masters of Science in Applied Physics

	Year #1 FY 2025	Year #2 FY 2026	Year #3 FY 2027	Year #4 FY 2028	Year #5 FY 2029
Total Incremental Revenue*	$ 17,724	$ 45,041	$ 78,268	$ 111,811	$ 156,536
Total Expenditures	$ 3,000	$ 29,777	$ (26,353)	$ 50,100	$ 97,269
Projected Program Surplus/(Deficit)**	**$ 14,724**	**$ 15,265**	**$ 104,621**	**$ 61,711**	**$ 59,267**

*Based on the anticipated number of ***new*** students to campus; transfers or existing students are not included. Projected incremental revenue is based on the current ***full-time, resident*** tuition and fees approved by the Bursar.

**Projected surplus/deficit is an aid to identify potential new University revenue, anticipated program costs, and degree substantiality. This does not represent any type of funding request.

Additional Departmental Footnotes:
Year 4&5 profit is projected to be low due to the one time capital investiment of equipment
and renovation of lab spaces for the program.
We will adjust the amortation rate to keep year 4 and 5 in a positive cash flow with minimal profit margin.

Table 3
Projected Headcount and FTE Enrollment and Degrees Conferred (Questions #6)

Board of Trustees & ICHE Table
Purdue FTW Campus
Masters of Science in Applied Physics

	Year #1 FY 2025	Year # 2 FY 2026	Year # 3 FY 2027	Year # 4 FY 2028	Year # 5 FY 2029
Enrollment Projections (Headcount)	2	5	8	12	16
Enrollment Projections (FTE)	2	4	7	10	14
Degree Completions Projection		2	3	7	10

Senate Reference No. 23-19

MEMORANDUM

TO: Fort Wayne Senate

FROM: Steven A. Hanke, Chair of the Education Policy Committee

DATE: 12/6/2023

SUBJ: Purdue Fort Wayne

The Education Policy Committee reviewed the proposal for the Purdue Fort Wayne AI Resource Group. The Education Policy Committee approved Catalog language stating that instructors must provide a course-level policy on AI usage (SD 23-10). If Colleges and Departments wish to develop their own student use guidelines, they may wish to consult an AI resource group. As such, the Education Policy Committee views the creation of a resource group as an appropriate step in meeting the needs of the university as it supports students engaging with these new technologies.

Approved	**Opposed**	**Abstention**	**Absent**	**Non-Voting**
Stephen Buttes				Chris Huang
Patricia Eber				Teri Swim
Steven Hanke				
Andres Montenegro				
Erik Ohlander				
Promothes Saha				

Purdue Fort Wayne AI Resource Group

As it relates to developing policies and especially guidance around AI usage, the Purdue Fort Wayne campus is falling behind our Purdue counterparts, as well as other institutions. Examples for illustration can be found below.

- Purdue Global AI Task Force
- Purdue Global AI and Academic Integrity
- Purdue WL College of Liberal Arts AI-Generated Writing: Guidelines
- Indiana University Acceptable Uses of Generative AI
- University of Texas at Austin acceptable use page
- University of Wisconsin-Madison Prohibited use and relevant policies
- University of Illinois Chicago Statement on Responsible Generative AI Use

Note: these examples are provided simply to demonstrate that other institutions are making progress towards providing guidance on student usage of AI, they are not being suggested as templates to be used. Rather, each college/department can design the most appropriate policies.

Similar to models from other universities, CELT is proposing PFW develop an AI Resource Group to assist colleges and departments in developing their own student use guidelines, as appropriate to each college/department. Developing instructor use guidelines and developing effective use, use cases may be secondary goals. We recommend that knowledgeable experts from CELT, ACITAS, the Library and ITS serve as leads to guide each college/department as they make decisions and draft their own policy/guideline of acceptable uses that fit within broader guidelines currently under consideration within EPC.

We believe this will need to be a multi-stage process, beginning with the leads working with representatives from each college, then those college reps, along with the leads working with department representatives. The goals and process are deliberately broad so that once the team(s) is/are built, the AI Resource Group can adapt as appropriate.