

DEI-AB Professional Development Plan for Physics

2024–2025 Academic Year

1. DEI-AB Goal(s)/Outcome(s)

The faculty and staff of the Department of Physics at Grand Valley State University share a love of physics that we wish to share with students from all walks of life. We believe that an opportunity to learn physics makes students better scientists and citizens and that a physics degree provides excellent opportunities for students to thrive in their careers. To ensure that everyone can flourish in our classes and department we prioritize fostering a learning environment that embraces all individuals, values diverse perspectives, and ensures equitable opportunities for every student and faculty member. With a dedicated focus on inclusive teaching practices and by cultivating a sense of belonging, we aim to create a community where everyone feels empowered to thrive, contribute, and succeed. Our commitment to DEIAB principles is integral to our mission of advancing knowledge and innovation in physics while nurturing a culture of respect, empathy, and collaboration.

As we embark on this journey to ensure our department is inclusive and that everyone has equitable opportunities to succeed academically, in their scholarship, and through their service we have two primary goals over the next three years (2024 – 2027):

- To enhance inclusive teaching practices within the Physics Department.
- To foster a sense of belonging among faculty, staff, and students within the department.

2. Objectives

- We recognize that students are at different places academically when they take physics and that they have diverse learning needs. Ensure our teaching practices and curriculum for our introductory classes provide equitable opportunities and support for student success.
- Cultivate a supportive and inclusive environment where faculty, staff, and students are valued and have opportunities to be connected to the department. Demonstrate that we value and recognize inclusive work in our teaching, scholarship, and service.

3. Strategies

- Our introductory courses serve students in diverse majors and who come from diverse backgrounds. To support inclusive teaching practices, we need to identify and understand issues that impact student success in our introductory courses. Based on the that information, we will review our courses and make revisions.
- Review our curriculum to ensure that we have appropriate courses for students who are at different places academically to support success in physics courses required for all programs.

- Cultivate a supportive and inclusive environment where faculty, staff, and students are valued and have opportunities to be connected to the department. Demonstrate that we value and recognize inclusive work in our teaching, scholarship, and service.
- Ensure our curriculum for our majors to support students from diverse backgrounds and with career goals.

4. Professional Development Activities

For inclusive teaching:

- **Foster faculty discussions:** Have a department-wide discussion about teaching in our introductory classes. The goal of the discussion is to understand where faculty are in terms of inclusive teaching, concerns they have around student success, and questions they have about what are the best practices for student success.
- **Faculty development seminar(s):** Invite in speaker(s) whose expertise is in inclusive teaching. Base the seminar around questions we have about best practices in teaching as well as how to get proper data so we ask the correct questions to make sure that we are not missing important points in addressing inequalities in opportunity or support.
- **Gather data on student success:** Task a group of faculty to gather data on student success in our introductory courses. Ensure that the data addresses student diversity and that it is used ethically.
- **Curriculum review and revision:** Form a task force (or more depending on need) to review existing course materials and identify areas where inclusivity can be enhanced. Update existing or design new courses to support student success regardless of their background in physics. Design assessments and advising practices to help understand what the best path for their success in their physics courses.

For faculty, staff, and student belonging:

- **Faculty development seminar(s):** Invite in speaker(s) whose expertise is in student and/or faculty and staff belonging. Use the seminars as an opportunity to learn how to identify issues of concern in the department and create a culture that supports opportunities where faculty, staff, and students can flourish consistent with our discipline.
- **Gather data on student/faculty and staff belonging:** Task a group of faculty to gather data on belonging and make recommendations to the department.
- **Curriculum review and revision:** Form a task force to review and develop curriculum to support our majors and ensure that they are prepared for a diverse opportunities after graduation.

General activities:

- **Assess additional development opportunities:** Based on discussions, determine other professional development opportunities to support inclusion in the department. Depending on departmental discussions, this may include additional speakers, support for professional development at conferences, additional training opportunities such as implicit bias training, or discussion opportunities such as readings around DEIAB.

5. Reflection on Learning

The department's primary focus in 2024-25 will be on inclusive teaching. At the end of the year the Unit Head and Departmental Advisory Committee will write a report summarizing the work done during the year and make recommendations for the 2025-26 academic year. This report will be sent to the faculty and staff for review and comment. The department will discuss the report at the final meeting of the academic year and send it to the Dean's office for feedback.

6. Timeline

Fall 2024: We will dedicate a session of our startup meeting to a discussion of questions about inclusive teaching to inform our future conversations and data gathering.

Fall 2024: A subgroup of the Departmental Advisory Committee (DAC) will discuss the conversation and recommend speaker(s) to invite in the winter semester.

Winter 2025: We will invite at least one speaker to give a talk on inclusive teaching practices. We will also ask them to facilitate a discussion with a subgroup around best practices for gathering appropriate data.

Winter 2025: A subgroup will gather data and make recommendation to the department around curricular and teaching changes.

Winter 2025: The department will generate and submit a final report for work to be done in the 2025-26 academic year.

2025 – 2026: Continue work on curricular and course changes. Begin work on the belonging discussion.

2026 – 2027: Assess curricular changes and revisit any future needed work. Implement recommended actions on belonging.