How does your course and/or course outline of record reflect strategies for accommodating and engaging diverse student populations, advancing equitable outcomes, and fostering inclusion for all students?

Example 1 – Incorporation of ZTC:
Our course integrates zero-cost textbooks and open educational resources (OER) as a core strategy to support and engage our diverse student population. By removing the financial barrier associated with purchasing traditional textbooks, we ensure that all students—regardless of socioeconomic background—have immediate and equal access to high-quality learning materials from day one. This approach directly advances equitable outcomes by reducing disparities in course preparedness and participation that can result from textbook affordability challenges.

Additionally, the use of OER allows for greater flexibility in content selection, enabling the inclusion of diverse perspectives, authors, and culturally relevant materials that better reflect our students' identities and lived experiences. This helps foster a more inclusive learning environment where students feel seen, valued, and more connected to the curriculum. Our course outline of record highlights the use of open-access materials as part of our commitment to equity, inclusion, and academic success for all learners.

Example 2 – Textbook from Diverse Authors:
The course reflects a strong commitment to equity and inclusion by featuring texts authored by individuals from a wide range of cultural, racial, and gender identities. These materials provide students with access to multiple perspectives, fostering deeper understanding and critical engagement with the subject matter. By amplifying historically marginalized voices, the course creates space for students to encounter viewpoints that may reflect their own experiences or challenge their assumptions in meaningful ways.

This approach not only broadens students' academic horizons but also cultivates a learning environment where all students feel respected and represented. The course outline of record explicitly includes works by diverse authors to ensure the curriculum remains inclusive, relevant, and responsive to the varied backgrounds of our student population.

Example 3 – Incorporate into SLOs linking ILOs:
The course and its outline of record reflect strategies for supporting diverse student populations by aligning Student Learning Outcomes (SLOs) with Institutional Learning Outcomes (ILOs) in ways that foster inclusion and equitable engagement.

For example, one course SLO asks students to analyze and interpret a range of texts within their historical, cultural, and social contexts. This outcome supports the ILOs in Global and Civic Awareness and Intercultural Literacy and Creativity, encouraging students to consider multiple perspectives and understand how different cultural experiences shape meaning. This helps students from varied backgrounds feel represented and included in the curriculum.

Another SLO requires students to construct clear, well-supported written arguments using credible sources. This aligns with the Communication and Critical Thinking ILOs and promotes equitable academic success by helping all students, including multilingual learners and first-generation college students, develop essential skills for expressing their ideas effectively.

Finally, a course SLO focused on collaborating with peers to discuss and solve complex problems reinforces the ILO for Personal, Academic, and Career Development. This supports inclusion by valuing diverse viewpoints in group work and fostering a respectful, professional learning environment where all students can contribute and grow.

By deliberately connecting course-level outcomes to broader institutional goals, the course structure promotes an inclusive educational experience that supports the success of all students, particularly those from historically underserved communities.

Example 4 – Course Content:
The course content incorporates a variety of real-world applications of functions that resonate with a wide range of student experiences. For example, students learn about linear functions through applications in budgeting and personal finance, quadratic functions in the context of projectile motion or architecture, and exponential functions in topics like population growth and technology. These examples are carefully selected to reflect diverse cultural, socioeconomic, and geographical perspectives, helping students from all backgrounds see how math applies to their own lives and communities.

In addition, the course content is delivered using multiple formats—text, visuals (such as graphs and diagrams), and interactive tools (like graphing calculators or software)—which accommodates various learning styles and provides multiple entry points for engagement. This approach is particularly beneficial for students who may face challenges with traditional lecture-based methods, ensuring that all students can access the material in a way that works best for them.

Example 5 – Culturally Relevant Examples:
Throughout the course, examples are drawn from diverse cultures, industries, and societal issues to demonstrate the practical applications of functions. This helps all students see themselves in the curriculum and recognize the value of math in their own lives and communities.

Example 6 – Accessible Learning Materials:
The course makes use of a variety of accessible learning materials, such as online videos, interactive software, and adaptive learning tools, ensuring that students with different abilities and learning preferences can access the content. For instance, students who are visually impaired have access to screen reader-friendly resources, while English Language Learners (ELLs) benefit from clear, simplified explanations and additional glossaries.

Example 7 – Collaborative Learning:
Collaborative group work is emphasized throughout the course, where students work together to solve problems, discuss different function types, and share insights. This promotes an inclusive classroom environment where students learn to respect each other's contributions, value different problem-solving approaches, and engage in supportive peer relationships.

By focusing on these strategies, the course ensures that all students—regardless of their background, learning style, or prior mathematical experience—are supported in their learning journey. The course content and objectives are specifically designed to remove barriers, foster engagement, and create an inclusive and equitable environment where every student has the opportunity to succeed.

Example 8 – Equitable Assessment:
Assessment in this course is designed to be fair and equitable, ensuring that students are evaluated based on their understanding and application of concepts rather than rote memorization. Students are provided with opportunities for formative assessment through quizzes and homework, where they receive feedback and have the chance to improve before the final exam. This approach promotes a growth mindset and allows students from all backgrounds to demonstrate their learning at their own pace.