Dean's Colloquium
Dr. Francis Erebholo, Associate Professor
Department of Mathematics

When: Wednesday, April 05, 2023
Where: Turner 129
Time: 3:30 – 3:50 pm, Q&A: 5 min
Title: The Impact of an Intervention on Students' Performance in Mathematics

Abstract: Students all around the United States have been affected by the decline in academic performance that Covid-19 made worse. This has led to subpar levels of college-readiness measures, particularly in mathematics. This lack of preparation frequently results in additional teaching, which wastes valuable class time by going over the prerequisite material again rather than using it to explore new topics in greater depth. This study aims to evaluate the impact of a mandatory recitation laboratory for precalculus students in bridging the conceptual gap, strengthening the concepts, eradicating any misunderstandings, and eventually improving student performance. The results demonstrated that the intervention significantly improved student performance and helped students close conceptual gaps in precalculus, thereby reducing the level of attrition from their majors and university. In addition, an instructor's effectiveness, students' attitude towards the recitation laboratory and lab. The effectiveness were strong predictors of students' performance.

Biography: Dr. Francis Erebholo is an associate professor and the director of undergraduate programs for the Department of Mathematics at Hampton University. He graduated with a Bachelor of Science in Industrial Mathematics from Ambrose Alli University, a Master of Science in Mathematics with a focus on numerical analysis from the University of Ilorin both in Nigeria, and a Master of Arts in Mathematics with a focus on Collegiate Teaching from Central Michigan University. He earned his Ph.D. in Mathematics from Howard University in 2015, and joined Hampton University 2015. Dr. Erebholo has a broad and strong mathematical background and specializes in the statistical analysis of missing data using the model of disposition, specifically missing data in clustered and longitudinal binary outcomes utilizing the Likelihood and Bayesian approaches. Dr. Erebholo undertakes research in both disciplines and between disciplines. His research interests include statistical analysis, error analysis of some numerical integration approaches for solving parabolic partial differential equations, mathematics, and statistics education.