



# Math Department Graduate Program Review 2024: Insights and Enhancement



## DEPARTMENT OF MATHEMATICS

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# Assessment Questions

- Demographic Information - nationality
- Application Process – challenges, visa, standard tests
- Academic Experience – academic support
- Teaching Assistantship – challenges, support
- Financial Aspects – adequacy, other financial challenges
- Career Preparation – departmental support, visa
- Future Studies – higher degree after graduation



# Workshop Objectives

- Review and Analyze Survey Data
- Identify Strengths and Areas for Improvement
- Enhance Students Support and Resources
- Foster Inclusive and Diverse Educational Practices
- Develop Actionable Plans
- Engage Stakeholders in Discussion



# Data Discussed

## OVERVIEW OF KEY DEMOGRAPHIC INFORMATION INSIGHTS

- **Participants:** All graduate students in the Math Department
- **Response Rate:** 8/10
- **Ratio of International vs. Domestic Students:** 7:1
- **Distribution of Participants by Home Countries:** Nigeria (4), Kenya (2), Spain (1), United States (1)



# Data Discussed

## OVERVIEW OF KEY APPLICATION PROCESS INSIGHTS

- **Application Challenges:** 2/8 students state there were challenges applying to this program, including complexity of application and getting funding
- **Visa Issues:** 5/7 international students claim they faced difficulties with the visa process, including delayed I-20, long waiting time for visa appointment, etc.



# Data Discussed

## OVERVIEW OF KEY ACADEMIC EXPERIENCE INSIGHTS

- **Average Rating of Academic Support from the Department:** 4.5/5 (1 = very poor and 5 = excellent)
- **Academic Support that Students Found Beneficial:** teaching process, accessible and caring faculty members, teaching assistantship opportunity, student advising service
- **Academic Support that Students Think Need Improvements:** stipend adjustment, more inclusive course mentoring program for international students



# Data Discussed

## OVERVIEW OF KEY TEACHING ASSISTANTSHIP INSIGHTS

- **Challenges with Teaching Assistantship:** 5/8 students claim facing challenges, including time management, hard to balance teaching workload and own courses, language barrier and having uncooperative students
- **Preparations that Department/University Provided:** training workshops, peer support groups, one-to-one mentoring, orientation and observation and reduced responsibility at the first semester



# Data Discussed

## OVERVIEW OF KEY FINANCIAL ASPECTS

- **Average Rating of Stipend Adequacy:** 3.25/5 (1 = completely Inadequate and 5 = fully adequate)
- **Additional Financial Challenges:** 4/8 students claim facing financial challenges based on the stipend provided, including transportation, not enough to cover rent and living expenses for whole family





# Data Discussed

## OVERVIEW OF KEY CAREER PREPARATION INSIGHTS

- **Average Rating of Preparation from the Department:** 3.875/5
- **Improvements that the Department Need:** more job and internship opportunities, more applied courses and arrange career talks with companies
- **Visa Support for International Students:** 5/7 international students claim the department/university provides support on obtaining OPT



# Data Discussed

## OVERVIEW OF KEY FUTURE STUDIES INSIGHTS

- **Higher Degree After Graduation**

- 2 students want to pursue a PhD degree in Applied Math or Statistics
- 3 students want to pursue a PhD degree in Math but are unsure for now
- 3 students claim not go for a higher degree



# Conclusions Reached

- Students are generally happy with the faculty members and learning experience from the department.
- Students need extra financial support.
- Students generally like the teaching assistantship experience but minor workload adjustment might be helpful.
- International students get substantial support both from the department and the university in all aspects.



# Items Chosen for Action

- Work with the department head and seek better benefits for the students.
- Construct connections with local industries for students to get job opportunities.
- The Data Science program is on the way and hopefully students will have more options in their course work.



# Follow-up Plans & Next Steps

- Plan the next assessment workshop to review the progress made and refine strategies as necessary.
- Repeat this survey once the Data Science program is fully operational.



**Questions?**