AMERICAN MATHEMATICAL SOCIETY

August 25, 2023

President Gee, Provost Reed, and the WVU Board of Governors:
I write regarding the proposed elimination of all graduate programs in mathematics, accompanied by drastic reductions in the faculty in the School of Mathematical and Data Sciences as laid out in the attachment.

Mathematics training is essential to the professionals who work to maintain our national security, prevent the next global pandemic, improve cyber security, and study artificial intelligence. Handicapping the study of mathematics will leave WVU students unprepared to address critical issues defining their future and unable to participate on par with other STEM professionals.

WVU currently offers the only doctoral mathematics program in the state. In my best understanding, the proposed cuts would leave West Virginia as the only US state without a graduate mathematics program. That would have far-reaching effects:

- West Virginians would now have to leave the state to pursue advanced mathematical sciences degrees.
- Several majors that are part of WVU's land grant mission will be harmed, including engineering, resources management, and business.
- The local talent pipeline - including future West Virginia high school math teachers, health professionals, and social scientists - would be negatively impacted. Please see Marjorie Darrah's testimony in the attachment illustrating the positive effects of WVU's mathematics program on West Virginia's economy.

I understand that deep cuts must be made, but the proposed plan is unwise. They place West Virginia in a negative national light and will diminish the university's ability to recruit and retain talent.

I urge you to engage with the faculty, take into account the long-term ramifications of these actions, and reconsider the proposed cuts.

Sincerely,


Bryna Kra
Sarah Rebecca Roland Professor of Mathematics, Northwestern University
President, American Mathematical Society
cc: WVU Faculty Senate Chair; Dean Greg Dunaway; Dean G. Corey Farris; West Virginia Senate; West Virginia House of Delegates; Governor Jim Justice; Mayor Jennifer Selin; US Senator Shelley Capito; US Senator Joe Manchin; US Representative Alex Mooney; US Representative Carol Miller
encl: Attachment-WVU-BoG-Letter-From-AMS-President-Kra.pdf

## WestVirginiaUniversity,

office of the provost and
VICE PRESIDENT FOR ACADEMIC AFFAIRS
August 10, 2023

Dear Dean Dunaway and Dr. Jessica Deshler,
As part of the ongoing Academic Transformation initiative, the Provost's Office has completed its Board of Governors Rule 2.2 Program Review process for the identified program(s) in the School of Mathematical and Data Sciences.

## Possible Recommendations

Under WVU Board of Governors Rule 2.2., there are four possible recommendations for programs, and they are defined as follows:

1. Continue at the current level of activity (i.e., no recommended changes for the program)
2. Continue at the current level of activity with specific action (i.e., the program will continue to exist, but there are recommended changes for the program, including reduction of faculty positions)
3. Development of a cooperative program (i.e., potentially merging one or more programs together to create a new program / curriculum)
4. Discontinue the program (i.e., program will no longer exist after a teach out is completed)

## Preliminary Recommendations

After considering the data previously released, the information contained within your unit's SelfStudy Review Form, and consulting with the unit's dean's office, the Provost's Office Preliminary Recommendation is as follows:

- BA/BS Mathematics: Continue at the Current Level of Activity with Specific Action
- Reduce the number of faculty associated with this program.
- Work with the Eberly College of Arts and Sciences' Dean's Office to revise the program's curriculum. By January 31, 2024, submit (in CIM) a meaningful revision of curriculum that will be more efficient, reduces the number of AOEs to three at maximum, and develops a pathway for students interested in a more applied focus. The math progression and associated content will also be streamlined in partnership with the STEM Collaborative and Eberly's Dean's Office and with the approval of the Provost's Office.
- PhD Mathematics: Discontinuance
- As a result of this discontinuance, the MS in Mathematics will also be discontinued. The unit has the Provost's Office approval to begin the Intent to Plan process for an applied mathematics / data sciences degree program at the master's level.

Additionally, the department should work with the STEM Collaborative to ensure it maintains the quality of its service courses and access for student scheduling in those courses. The unit should also work to increase section size where appropriate, deliver more online sections, and adjust its faculty workloads with a greater emphasis on teaching and a decreased emphasis on research / scholarship. With discontinuation of the PhD in Mathematics, the new baseline course load for tenured and tenure-track faculty members will be 3:3; the baseline course load for teaching-track
faculty will be 4:4. A revised workload guidelines document is to be submitted to Associate Provost for Faculty Development and Culture Melissa Latimer by October 31, 2023.

The key components that led to the Provost's Office Preliminary Recommendations include the following:

- The department was placed under review due to declining enrollment, a decrease in student credit hours and revenue, and a worsening net revenue trend.
- The plan presented by the unit in its self-study presented primarily focused on decreased cost through retirements and otherwise focuses on increasing revenue through a new Data Sciences degree, which has not so far had a successful launch. The unit proposed to reduce AOEs to six for undergraduate program. The self-study selectively engaged with its data, admitting that the unit is at the bottom of Big 12 student-to-FTE ratios but also recalculating metrics in support of the status quo. The unit has reduced operational costs, increased undergraduate recruiting efforts, and made a number of efforts to improve student success in its service courses with mixed results.


## Next Steps for Discontinuance or Development of Cooperative Program

For each program that has been recommended for discontinuance, the unit should submit an initial staffing plan for the teach-out process to Associate Provost for Academic Personnel Tracy Morris by September 8, 2023. If the Board of Governors approves this recommendation, the Provost's Office then requires that a full teach-out plan be submitted in CIM by October 31, 2023.

## Faculty Reduction Recommendations

Through this process, the Provost's Office has determined that the number of faculty positions in the unit should be reduced from its current number to 30 . If this recommendation is approved by the Board of Governors on September 15, the Provost's Office, in consultation with the dean's office and the chair (where applicable), will develop the Reduction in Force Plan. This plan will determine the specific faculty members in the unit who will be retained or subject to a reduction in force / nonrenewals. Additionally, that process will include discussion of which faculty positions can be reduced as of May 9, 2024, and which positions may be offered an extension beyond May 9, 2024, for teachout programming. Finally, please note that in many units, voluntary attrition by faculty members (i.e., leaving the University for another opportunity or retiring from the University after July 1, 2023, and by or before June 30,2024 ) may be considered as part of the faculty positions that are counted for elimination. However, the individual voluntarily leaving the University must provide the University notification of their resignation or retirement by September 30, 2023, if it is to be considered as part of the reduction numbers.

## Notifying Your Faculty and Staff

The chair or school/division director must notify the faculty and appropriate staff within this unit of the Provost Office's Preliminary Recommendations by forwarding this email and CCing Associate Provost for Curriculum and Assessment Lou Slimak (Louis.slimak@mail.wvu.edu) and the college dean. This notification should occur within 24 hours of receiving this letter.

## Program Review Appeal Process

If a chair, school/division director, or faculty member opts to appeal any part of the Provost's Office Preliminary Recommendation, they must submit a Notice of Intent to Appeal by August 18, 2023.

Any chair, school/division director, or faculty member who files a Notice of Intent to Appeal will receive notification at least three business days in advance of when the Program Review Appeal Committee hearing for their program will be scheduled. Most hearings will occur between August 21

- September 5, 2023.

To ensure a broad-based representation, the Provost's Office will establish a Program Review Appeal Committee specific for each unit. Members will include the vice provost, an associate provost (undergraduate or graduate), the program review officer, a representative from the dean's office of the unit's home college, two representatives from dean's offices outside of the unit's home college, and the Faculty Senate chair or designee.

The chair, school/division director, or faculty member who filed the Notice of Intent to Appeal must submit the Program Review Appeal Form, which contains any additional information or data they wish the Program Review Appeal Committee to consider, at least two business days in advance of the hearing. For units appealing the number of faculty to be reduced, it is strongly recommended that the unit present a staffing plan that demonstrates what number of faculty are needed to deliver the unit's curricular requirements, including the number and size of its section offerings.

During the appeal hearing, the unit's representative is given 30 minutes to present the substance of their appeal and 15 minutes to address questions from the Program Review Appeal Committee.

The Program Review Appeal Committee will then deliberate and vote to accept or change the Provost's Office Preliminary Recommendation. The program review officer tallies the votes, informs the Program Review Appeal Committee of the results, and communicates the results to the dean's office and chair or school/division director within three business days following the hearing.

If the appeal is denied, the original recommendation will be presented to the Board of Governors for a vote on September 15. If the appeal is granted, the Program Review Appeal Committee may provide a new recommendation to the dean and chair or school/division director. This new recommendation would also go to the Board of Governors for a vote. All decisions made by the Program Review Appeal Committee are final.

## Additional Resources

Additional information on the process and timeline is available at: https://transformation.wvu.edu/resources.

Sincerely,
WVU Office of the Provost


At this URL please find a petition regarding the proposed cuts to the School of Mathematical and Data Sciences, testimonials and support letters, as well as other resources.
https://sites.google.com/view/wvusmdsreview/home?authuser=0
Professor Marjorie Darrah's Testimonial
https://sites.google.com/view/wvusmdsreview/testimonials

## Marjorie Darrah (WVU Alum, PhD in Math, and Professor of Mathematics at WVU)

I received both my Master's and PhD in Mathematics from WVU and oh the places it has taken me!!! I was the first woman to receive a Ph.D. in Mathematics from a West Virginia academic agency in 1995. I went on to teach at a small college in West Virginia for 10 years. After that, I worked for the West Virginia High Technology Consortium for five years where I became the Director of the Computer Sciences Group. During my time there I was able to work for many government agencies (NASA, Air Force Research Labs, Army Research Labs, etc.) and become the PI on multiple projects, including three National Science Foundation awards bringing millions of dollars into the state of WV. I went on to take a job at WVU and later became the first woman chair of the Mathematics Department. I was also able to help start two small businesses in West Virginia and do consulting work for several others to help them secure government contracts from NASA, the Department of Homeland Security, Army Research Labs, US Department of Education, and more. For one of my businesses, I do educational evaluations and have completed more than 25 evaluations for projects at the local, state, and national levels. I do research in the areas of artificial intelligence and STEM education. I have written dozens of papers, several books, and book chapters, and presented my research in places around the world. There is much more that I could discuss, but the bottom line is that none of this would have been possible without my wonderful start in the WVU Mathematics Graduate program.

