

Academic Admissions Standards Committee (AASC)

Midterm Report (December 2023)

Membership

Co-Chair(s):

- Rudy Molina (Vice Provost, Student Academic Success and Enrollment Management)
- Traci Zimmerman (Interim Dean, CAL)

Members:

- Audrey Burnett (Associate Dean, University Studies)
- Katherine Ott Walter (Faculty Senate representative)
- Melinda Wood (AVP, Access and Enrollment Management; Director of Admissions)
- Wren Stevens (Associate Dean, CVPA)/Karin Tollefson-Hall (alternate)
- Jeff Tang (Associate Dean, CISE)
- Molly Brown (Associate Dean, COB)/Sam Collier (alternate)
- Doug Hochstetler (Associate Dean, CHBS)
- Ravi Shankar (AUH, Math and Statistics)
- Katie Dredger (AUH, Middle, Secondary, and Mathematics Education)

Charge:

- The JMU Academic Admissions Standards Committee will recommend initiatives to align admissions and execution of instruction with the strategic goals of the Academic Affairs division.
- Our core principle: Admission standards to academic programs, like the execution of instruction, should be determined by the Division of Academic Affairs.

Objectives:

The success of this committee's effort will be measured by the formulation of inclusive admissions criteria with periodic updates, the creation of an effective, transparent admissions decision process, and the analysis and documentation of the following objectives:

- Standards: Investigate individual program admissions, progression, and graduation standards
- Trends: Identify and recommend academic areas with the greatest potential for growth
- Resources: Identify the needs and considerations for resources such as space, funding, personnel, materials, technology requirements, and others to meet evolving enrollment demands
- Capacity: Examine university infrastructure and create a clear metric that ensures adequate capacity for academic programs

Summary of Current Semester Activity:

The AASC met four times in the spring semester. From these meetings and discussions – during which we reviewed ALEKS data with the AUH and Associate AUH of Math & Stats – the AASC committee has drafted new admissions language to align math requirements with programmatic needs (Appendix I). The math requirement as written did not fit the needs of majors/programs, and the revision allows prospective students (and other audiences) to better understand what level(s) of math might be needed for particular majors at the university (Appendix II). The anticipated benefits of the change are as follows:

- Better alignment with students and math levels = progress through majors and degree programs
- Less time to graduation
- Better course management for math & stats department
- Support overall student success

Adjacent to these AASC foci, we also discussed ways to make clear to students the role of the ALEKS tool – namely, that it is not a “test” that students should try to get a high score on (and some perhaps cheat to do so). It is a placement tool whose scores are used to put students where they belong, maximizing their chances for success and progression. Those students who earn high scores inauthentically end up being irrevocably placed in math classes that they are unable to pass and then they cannot be moved to a lower course. We want to make this transparent to incoming students and parents so that it is understood how the scores work so that more students end up in the correct math level.

Future Work Planned:

- AUH and Associate AUH of Math & Stats will share recommendation with CSM leadership and the Math & Stats department
- Co-Chairs of AASC will share recommendation with Provost and then will move forward with sharing with several key constituents for review:
 - Faculty Senate
 - Academic Council/Deans
 - Admissions Team
 - Provost Leadership Team
 - Cabinet

APPENDIX I

Math Admissions Requirement Recommendations

Academic Admissions Standards Committee

December 18, 2023

Summary of Recommendations

1. Math Admissions Requirement Statement **for Fall 2025 Admitting Cycle**
 - a. Update the Math Admissions Requirement Statement.
 - b. Design a tool for advisors, staff, faculty and other internal stakeholders.
 - c. Design a webpage for high school students and external stakeholders.
2. Communication Steps and Stakeholders
 - a. Develop a rationale and communication plan for key stakeholders.
 - b. Identify the stakeholders who should receive the information.
 - c. Establish the order of communication, along with a corresponding timeline.

Recommendation Details

Recommendation 1.a. Update the Math Admissions Requirement Statement

Identify all digital and print references of the Math Admissions Requirement statement. Below are two references, the first being on the admissions website and the second being on the Academic catalog.

The changes would take effect for the class admitted to JMU for Fall 2025.

Original Statements and URLs:

- *Mathematics requirement: One full year beyond Algebra II in a course for which Algebra II is the prerequisite. Course recommendations may include Pre-Calculus, Calculus, Math Analysis, Finite Mathematics, Trigonometry and Probability/Statistics. Courses that **do not** meet this requirement include Algebra Functions and Data Analysis, Computer Science and Consumer Mathematics. For questions about a specific math course, please contact us. [Freshman Admission - JMU](#)
- Four years of math with at least one full year beyond algebra II (i.e. pre-calculus, trigonometry, discrete math, statistics, math analysis, etc.). Consumer math, personal finance, and algebra functions and data analysis will not be evaluated as a full year beyond algebra II - [Admissions - James Madison University - Acalog ACMS™ \(jmu.edu\)](#)

Revised Statement:

We ***expect one year of math beyond Algebra II but it is not required for admission; the additional year of math beyond Algebra II (for which Algebra II is a prerequisite) is highly recommended for certain majors.***

(NOTE: the highlighted area will be linked to the table so that prospective students/advisors/etc. can quickly review what those certain majors are.)

Recommendation 1.b. Design a Tool for Advisors, Staff, Faculty and Other Internal Stakeholders

- The tool is a summary that categorizes the majors by recommended calculus and statistics preparation.
- See Appendix for proposed table.

Recommendation 1.c. Design a Webpage for High School Students and Community Stakeholders

- The webpage should provide the same information as the table, however it should be tailored for prospective students, families, and the high school counselors.
- The webpage should have functionality such as filtering by major, calculus, and/or statistics preparation.
- This webpage has not been designed yet and should require consultation from the JMU Marketing team and other colleagues to ensure accessibility and user interface is appropriate.

Recommendation 2.a. Develop a Rationale and Communication Plan for Key Stakeholders

Below are statements designed to inform internal and external stakeholders. They have been phrased as questions, with the talking points listed below each question.

Q1. Why was this committee formed and what were the key principles that drove the work of the committee?

- Formed to further develop the partnership between admissions and academic
- Advocate for greater transparency & equity when admitting students
- Learn more about the admissions and financial aid processes
- Create policies that promote admitting students in ethical way, maximize student success

- Promote a full student enrollment lifecycle perspective, understanding the admissions strategies and student success strategies
- Develop intentional practices that promote the relationship between admissions and math expectations by major

Q2. Who is a member of the Academic Admissions Standards Committee (AASC)?

- Co-chaired by Rudy Molina, Vice Provost for Student Academic Success and Enrollment Management and Traci Zimmerman, Interim Dean of CAL
- Faculty Senate Rep – Dave McGraw (2021 to 2022) and Kathy Ott-Walter (2022 – Present)
- College Membership and Past Reports: [Academic Admissions Standards Committee - JMU](#)

Q3. What is the Problem Being Addressed?

- The original Math Requirement statement published on the Admissions website was confusing and did not make sense to the reader:
 - *Mathematics requirement: One full year beyond Algebra II in a course for which Algebra II is the prerequisite. Course recommendations may include Pre-Calculus, Calculus, Math Analysis, Finite Mathematics, Trigonometry and Probability/Statistics. Courses that do not meet this requirement include Algebra Functions and Data Analysis, Computer Science and Consumer Mathematics. For questions about a specific math course, please contact us. - <https://www.jmu.edu/admissions/apply/freshman/index.shtml#complete>
- For example, it lists categories without much context for the student and does not provide helpful information about majors and their respective math expectations.
- After further review, it led us to the question, why is this the math requirement for JMU?

Q4. Why did the committee choose to work on this topic at this point in time?

- The timing of the review made sense because the University was transitioning to the Common App, we had a new Director of Admissions, and it was important for AA to further develop the partnership with Admissions.

Q5. What was the process the AASC used to review the Math admissions requirement?

- Review of ALEKS data and consulted with the Math and Stats AUH and Assoc. AUH
- Consulted with Deans on the potential impact on updating the statement
- Melinda discussed with her leadership and admissions team to gather feedback
- Provost Leadership Team and Academic Council were consulted
- Ongoing conversations with the Faculty Senate Speaker and active membership at each monthly meeting

Q6. What is the proposed solution and rationale?

- This is not lowering of the math standard, this is aligning requirements with actual programmatic needs
- The requirement, as originally stated, did not make sense, now it does.
- The statement and tools developed are clearer to internal and external stakeholders.
- It is clearer for the admissions team now that they can refer to a list of majors by levels of math preparation.
- It will also help academic advisors when supporting students as they declare and/or change their major and as they make progress towards degree during their academic career
- Informs students about specific math and stats requirements for degrees
- Empowers students to make degree decisions based on clear and up to date standards

Q7. What were some of the other options that the committee discussed before determining this option?

- Option 1 - Waiver: There were fundamental aspects that made the waiver option less viable:
 - It created more administrative work for the admissions team, a team that is already challenged with a large volume of applications due to the switch to the common application
 - It created more equity challenges because the students who knew of the waiver, or had the resources to activate the waiver, would then have an unfair advantage of accessing the waiver
- Option 2 - Remove the Math Admissions Requirement: Although discussed briefly, it was not a viable option:
 - The committee believed that it would be important for the University to have a clearly stated statement so that students would understand the implications for admission to JMU but also the impact it could have on their academic success as they progressed through their declared major
- Option 3 - Updating the Math Admissions Requirement statement: Ultimately this is where we ended up as our most viable approach:
 - Most importantly, the committee felt strongly that additional information would need to be included to make the statement meaningful to the student and perhaps to help them make decisions during HS as they enrolled in math courses or later on when they were to actually declare a major at JMU:
 - List of majors by math and stats requirements
 - Better communication around use of ALEKS to address cheating,
 - Take math for authentic placement, not to pass or highest grade

Q8. How will JMU know that the revised statement will not have an adverse impact on admission trends or long-term student success outcomes?

- The assessment plan will include the following:
 - Partner with the Math and Stats department to review, annually, the data produced by the ALEKS assessment, academic outcomes such as GPAs for students who have applied, been accepted, and have enrolled.
 - Consult with CARS (or other entities) to analyze data collected from multiple sources

Q9. What are the anticipated benefits?

- Better alignment with students and math Levels = progress through majors and degree programs
- Less time to graduation
- Better course management for math and stats department
- Support overall student success
- Sends a clear message to students that no majors are closed to new students during the time of admissions and/or change of major declaration

Recommendation 2.b. Identify the Stakeholders who Should Receive the Information

1. College of Science and Math Leadership
2. Faculty Senate
3. Academic Council/Deans
4. Admissions
5. Provost
6. Cabinet

Recommendation 2.c. Establish the Order of Communication, Along with a Corresponding Timeline

January 2024:

- Dean of College of Science & Math will be briefed - Ravi
- Provide update to broader faculty senate membership of her role in the AASC and answer questions - Kathy
- Provost Leadership Team will be briefed – Rudy
- Academic Council will be briefed – Rudy & Traci

- Access and Enrollment Management leadership and Admissions team will be briefed – Melinda
- Feedback will be provided compiled – AASC Membership
- Revisions to the recommendations will be made – Rudy & Traci

February 2024:

- Recommendations will be prepared for President’s Cabinet review - Provost
- Feedback will be provided compiled – President’s Cabinet
- Revisions to the recommendations will be made – Rudy & Traci

March 2024:

- Work with marketing team to develop a prototype of the new webpage for external stakeholders.

August 2024:

- Publish all materials

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Appendix II

Required Calculus

		None	Applied	STEM
Required Statistics	None	Anthropology, B.A. Art History, B.A. Art, Architectural Design Major, B.F.A. Art, B.A. Art, B.F.A. Art, B.S. Art, Graphic Design Major, B.F.A. Art, Industrial Design Major, B.S. Communication Studies, B.A. Dance Major; B.A. Educ: Elementary Education, B.S. † Educ: Inclusive Early Childhood Educ., B.S. Educ: Middle Grades Education, B.S. Educ: Secondary Education, B.S. Educ: Special Education, B.S. Educ: Teaching English to SOL, B.S. English, B.A. History, B.A. Hospitality Management, B.S. Individualized Study B.A. Individualized Study B.S. Individualized Study, B.A. Individualized Study, B.I.S. Individualized Study, B.S. International Business, B.B.A. Kinesiology, B.S. Media Arts and Design major; B.A. Media Arts and Design major; B.S. Modern Foreign Languages, B.A. Music, B.A. Music, B.M. Nursing, R.N. to B.S.N. Philosophy and Religion, B.A. Sport and Recreation Management, B.S. Theatre, B.A. Theatre, Musical Theatre Major, B.A. Writing, Rhetoric and Technical Comm., B.A. Writing, Rhetoric and Technical Comm., B.S.	Geology, Earth Science Major, B.A.	Biophysical Chemistry, B.S. Engineering, B.S. Physics, B.A. Physics, B.S.
	Introductory	Anthropology, B.S. Biology, B.A. ** (also see pre-med minor) Biology, B.S. ** (also see pre-med minor) Biology, Forest Biology, Dual Degree ** Comm Sciences and Disorders; B.A. Comm Sciences and Disorders; B.S. Communication Studies, B.S. Dietetics, B.S. General Psychology, B.A. General Psychology, B.S. Geography, B.A.* Geography, B.S.* Health Sciences; B.S. Health Services Administration, B.S. Information Technology, B.S. Intelligence Analysis, B.S.* International Affairs, B.A. Justice Studies, B.A. Justice Studies, B.S. Nursing, B.S.N. Political Science, B.A. Public Administration, B.S. Social Work, B.S.W. Sociology, B.A. Sociology, B.S.	Accounting, B.B.A. ‡ Business Management, B.B.A. ‡ Computer Information Systems, B.B.A. ‡ Economics, B.A. ‡ Economics, B.B.A. ‡ Economics, B.S. ‡ Finance, B.B.A. ‡ Integrated Science and Technology, B.S.* Marketing, B.B.A. ‡	Biotechnology, B.S. Chemistry, B.S. Computer Science, B.S. †† Geology, B.S. Pre-Medicine minor Pre-Optometry minor Pre-Pharmacy minor Pre-Veterinary Medicine minor
	Advanced			Mathematics, B.A. Mathematics, B.S. Quantitative Finance, B.S. Statistics, B.S.

Required Calculus

		None	Applied	STEM
Required Statistics	None	Anthropology, B.A. Art History Art Art, Architectural Design Art, Graphic Design Art, Industrial Design Communication Studies, B.A. Dance Major Educ: Elementary Education † Educ: Inclusive Early Childhood Educ. Educ: Middle Grades Education Educ: Secondary Education Educ: Special Education Educ: Teaching English to SOL English History Hospitality Management Individualized Study International Business Kinesiology Media Arts and Design major Modern Foreign Languages Music Nursing, R.N. to B.S.N. Philosophy and Religion Sport and Recreation Management Theatre Theatre, Musical Theatre Writing, Rhetoric and Technical Comm.	Geology, Earth Science Major, B.A.	Biophysical Chemistry Engineering Physics
	Introductory	Anthropology, B.S. Biology ** (also see pre-med minor) Comm Sciences and Disorders Communication Studies, B.S. Dietetics General Psychology Geography* Health Sciences Health Services Administration Information Technology Intelligence Analysis* International Affairs Justice Studies Nursing, B.S.N. Political Science Public Administration Social Work Sociology	Accounting ‡ Business Management ‡ Computer Information Systems ‡ Economics ‡ Finance ‡ Integrated Science and Technology* Marketing ‡	Biology (pre-professional) Biotechnology Chemistry Computer Science †† Geology, B.S. Pre-Medicine minor Pre-Optometry minor Pre-Pharmacy minor Pre-Veterinary Medicine minor
	Advanced			Mathematics Quantitative Finance Statistics

Course Options

INTRODUCTORY STATISTICS

Possible courses: MATH 220, MATH 229, COB 191 (satisfies requirements for COB majors only), ISAT 251 (ISAT majors only), or Probability Statistics

Placement: Depending on a student's ALEKS placement score, the student may need to first complete MATH 105.

ADVANCED STATISTICS

These statistics courses include more theory about probability distributions and require the completion of Calculus 2 (MATH 236)

Possible courses: MATH 318 or MATH 329

APPLIED CALCULUS

Possible courses: MATH 205, ISAT 151 (ISAT majors only), or STEM Calculus

Placement: Depending on a student's ALEKS placement score, the student may need to first complete MATH 155 or concurrently enroll in MATH 199.

STEM CALCULUS

Possible courses: MATH 231+232 or MATH 235

Placement: Depending on a student's ALEKS placement score, the student may need to first complete MATH 155 or concurrently enroll in MATH 199.

OTHER

Students in majors with no statistics or calculus requirements only need to satisfy the university's General Education Natural World quantitative reasoning requirement, which includes all of the introductory statistics and calculus courses as well as MATH 103 and MATH 105.

Special Notes

† Elementary Education majors are required to complete MATH 110 and MATH 210.

‡ Majors in the College of Business are generally recommended to complete their major's statistics requirement with COB 191 but this can be replaced by MATH 220.

* Integrated Science and Technology majors complete their applied calculus requirement with ISAT 151 and their statistics requirement with ISAT 251.

** Biology majors require a second mathematics course in addition to introductory statistics from a list of courses which includes STEM calculus. In addition, several health-related pre-professional minors common to biology majors require calculus.

†† Computer Science majors also require a discrete math class that is satisfied by CS/MATH 227 or MATH 245.