

## CUSA'S REPORT AND RESPONSE TO DEAN'S CHARGES FOR CUSA 2016-2017

### CUSA Quantitative Analyses

New Courses:	145
New Programs:	2
Course Changes:	192
Program Changes:	80
Course Deletions:	45
New Certificates:	7
New BGS Career Preparation Courses:	27
Elimination of Major Admission Requirements	
Changes to Departmental Honors Requirements	

### CUSA Response to Dean's Charges

**1. What policies and procedures do we need to help faculty be (a) more aware of the needs of a diverse student body and (b) be more directly involved in successful undergraduate retention and progression, both philosophically and practically?**

CUSA did not address this charge directly. However, Andrea Greenhoot addressed it, in part, in reviewing CTE's efforts to provide faculty development opportunities related to access, retention, and progression. CUSA considered two related questions, but did not act on them:

- Whether faculty members should be more involved in advising.
- Whether faculty members should be involved outreach. This is partially a recruitment issue, but might affect retention.

**2. What policies and procedures include potential barriers to student retention and progression, especially those populations that have historically experienced the highest rates of DFWs, stops, and dismissals? Consider strategies that can have a positive impact while maintaining the rigor of the degree.**

This charge took most of the Policy and Awards Subcommittee's time and effort this year, but also the full committee's time and effort when the Subcommittee needed advisement and a full committee vote. CUSA addressed the charge in the context of the MATH's requirements, procedures, and policies for MATH 002 and MATH 101. In doing so, the Subcommittee met with Marge Bayer and Ingrid Peterson from MATH and with DeAngela Burns-Wallace from the Provost's Office in the fall. In the spring, CUSA moved Mat Johnson (MATH) from the Curricular Changes and Degree Requirements Subcommittee to the Policy and Awards Subcommittee so that the Subcommittee had more input from MATH and it met again with Marge Bayer, once just with Barbara Anthony-Twarog and once with the full Subcommittee. The Subcommittee also met with Dan Katz. I also had some extended emails with Melissa Mikkelsen (Math Academic Advisor) about MATH's policies and procedures and met with Stuart Day and DeAngela Burns-Wallace about CUSA's considerations and proposals (see Appendix A). CUSA made three recommendations about (a) early and continuous enrollment, (b) the quantitative reasoning requirement, and (c) the elective quantitative reasoning requirement.

### **Early and Continuous Enrollment (approved at the April 2017 CAC meeting)**

Based on CUSA's considerations and proposals (see Appendix A, Appendix B), CUSA recommended that entering students not be required to begin the MATH requirement until their second semester of enrollment, but must begin by their second semester and that they have three semesters to meet the requirement, including the first year's preceding and succeeding summer terms. The language it proposed was:

Undergraduate students enrolled in the College of Liberal Arts and Sciences are expected to make timely progress towards completing their degree requirements. In an effort to have students remain compliant with the requirements of the KU Core and the College, students are required to complete the Written Communication requirements of both the KU Core and their degree within the first academic year of their enrollment and to complete the Quantitative Literacy requirements of both the KU Core and the College by the end of their third full semester. To ensure compliance with this policy, students may be administratively registered for courses if, after the first semester, the College determines that they are not on track to meet the requirement. The College also may place administrative holds on records of students not in compliance with this policy. Students should play close attention to the requirements specific to their degree and major. Some degrees and majors require specific Goal 1, Learning Outcome 2 courses to meet the requirements of the KU Core, their degree and their major or minor.

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MATH also agreed to eliminate its policy of not allowing students to disenroll from MATH 002 and MATH 101 without submitting a petition that is approved until the day they could no longer receive a full tuition refund. If they stopped attending without permission, they received a grade of F in the courses.

## **Quantitative Reasoning Requirement (approved at the May 9, 2017 CUSA meeting – pending CAC review)**

Based on CUSA's considerations and proposals (see Appendix A), CUSA recommended that the Quantitative Reasoning B.A. requirements be changed from:

### **Current CLAS Degree Requirements**

The Bachelor of Arts degree requires:

- **Quantitative Reasoning.** 3 credits. This course must have **MATH 101** (College Algebra) or a higher mathematics course as a prerequisite. Additionally, this course must also be either approved for Goal 1, Learning Outcome 2 of the KU Core or another course approved by CUSA.

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### **Proposed CLAS Degree Requirements**

The Bachelor of Arts degree requires:

- **Quantitative Reasoning.** 3 credits. This course must be either approved for Goal 1, Learning Outcome 2 of the KU Core or another course approved by CUSA. Additionally, this course must be offered by a department/program within the College of Liberal Arts and Science. This requirement is in addition to the KU Core Goal 1, Learning Outcome 2 for quantitative literacy required by the KU Core.

**Considerations.** With non-Math courses fulfilling the B.A. requirement, students will be able to complete the requirement and graduate in a more timely manner. These might include some, but not all, courses in statistics, quantitative analysis, mathematical and computer modeling, and logic. Just as KU values “writing across the curriculum,” so too should it value “quantitative reasoning across the curriculum.” This proposal will require changes in the College B.A. degree requirements that cannot be made by next fall, but they can begin.

**Considerations.** Additional language should be adopted and incorporated into the CLAS Policy Library to clarify the standards by which CUSA will accept a course in fulfillment of this requirement. CUSA anticipates recommending that the courses presume a competency equivalent to successful completion of MATH 002, an equivalent ACT/SAT score or an equivalent performance on a placement test. *CUSA recommends that the Dean charge next year's CUSA with drafting guidelines for course approval.* In addition:

- Departments that require MATH 101 as a prerequisite for courses in quantitative reasoning should consider whether MATH 101 is a necessary prerequisite. If not, then the prerequisite could be dropped. This will require CUSA and CAC approval for course changes and changes in majors that can begin.

- Not requiring MATH 101 as the prerequisite for the College's B.A. requirement in quantitative reasoning will allow students to complete their major and minor requirements in a timelier manner. This will require changes in the College B.A. degree requirement that cannot be made by next fall, but they can begin.
- Allowing non-Math courses to satisfy the elective requirement in quantitative reasoning would increase the number of alternative courses in other departments. These might include some, but not all, advanced courses in statistics, quantitative analysis, mathematical and computer modeling, and logic. Just as KU values "writing across the curriculum," so too should it value "quantitative reasoning across the curriculum." This will require changes in the College B.A. degree requirement that cannot be made by next fall, but they can begin.
- Given the change in the Math requirement, departments that remove MATH 101 as a prerequisite for a course in quantitative reasoning might revise the course, if necessary, and submit it to CUSA for approval as a course that satisfies the B.A. Math requirement in quantitative reasoning. This will require CUSA and CAC approval of courses that meet the requirement.
- Given the change in the Math requirement, departments that do not have courses in quantitative reasoning might develop ones that satisfy the B.A. Math elective requirement in quantitative reasoning. This will require CUSA and CAC approval of new courses that meet the requirement.

In addressing this charge, CUSA also eliminated major admissions requirements.

**3. How can the curricula in the College be more responsive to a student body that is (a) more career-oriented and (b) in need of the cultural competencies that an increasingly diverse global society and marketplace demands?**

CUSA did not address this charge. It did, though, consider two related the questions, but did not act on them:

- Should departments be asked to consider how their undergraduate curriculum prepares their students for a direct career path option?
- What current requirements exist in each unit that address cultural competency? How can departments that don't currently have an obvious option incorporate one into existing curriculum?

**4. In what ways can we increase utilization of winter and other intersession terms, as well as explore opportunities such as 8-week courses as a part of strategic retention and progression strategies for undergraduate students in the College?**

CUSA did not address this charge.

**5. What opportunities are there for infusing diversity, equity, and inclusion in the undergraduate student experience?**

CUSA did not address this charge.

**6. Consider ways in which we can partner with the Center for Teaching Excellence (CTE) and other resources on campus to provide faculty development opportunities related to access, retention, and progression.**

This charge concerns not only the CTE, but also whether faculty members and GTAs are prepared to teach the curriculum in a manner that incorporates the College's goals in every aspects of their instruction. This is a sensitive issue – that is, seemingly telling faculty how to teach – but was not addressed directly by CUSA. However, the Policy and Awards Subcommittee did meet with Professor Greenhoot, the CTE Director, about the CTE's work that addressed this charge. She provided the following summary this summer.

**Course transformation initiative.** The CTE has been leading a university-wide initiative to transform large courses around teaching practices that improve student learning and success and reduce long-standing achievement gaps for underrepresented students. This involves coordinating the teaching postdoctoral fellows program, which embeds a teaching postdoc in a department for three years to collaborate with faculty to transform 4-5 courses, the C21 Course Redesign Consortium, a university-wide intellectual community of faculty, staff, and students who share the goal of student-centered course transformation (this includes 4-5 workshop-like meetings each semester, mini-grants and support from graduate student fellows for course transformation, and other resources), and our NSF funded TRESTLE project, a 7-university project (led by KU) to promote STEM course transformation. The changes being made to courses are leading to reduced DFW rates, reduced achievement gaps, and better learning of essential learning outcomes. We are also working on looking at how improvements to individual courses are affecting success in downstream courses and in the major, but it has been challenging getting access to the data needed to do those analyses (see next point below).

**KU STEM analytics program.** We recently received a 2-year mini grant from the AAU STEM Education initiative to support a STEM analytics program at KU. The program supports STEM analytic teams (teams of faculty) in each participating department. We are helping them ask, operationalize, and answer questions about student retention and progression to graduation with institutional data and develop action plans informed by their results. The project is quite synergistic with the Course Transformation Initiative. Because the funding comes from the AAU STEM initiative, it is limited to STEM departments, but the CTE would like to find a way to support expansion into other disciplines.

**Promoting inclusive teaching.** The CTE has developed new programming and materials in the last two years to promote adoption of a range of inclusive teaching practices, including practices that support learning in a diverse population of students (the same practices as those promoted through the course transformation initiative), strategies for creating an inclusive climate in the classroom, and strategies for handling “difficult dialogues.” For example, we have revised the new GTA conference to address inclusive teaching practices in the plenary and one of the Teaching Essentials sessions, have been offering a workshop as part of new faculty

orientation, and have developed a new program, the Diversity Scholars Program, which is a year-long faculty seminar in which faculty redesign a course and develop a plan for outreach and leadership around inclusive teaching in their own units. The CTE has just received funding from Faculty Development and Academic Affairs to recruit a second cohort. The idea is to improve courses, but also to develop a network of faculty who can become leaders of this work across campus.

**Assessment support.** Degree-level assessment is another place where departments can look at and make improvements to student retention and progress to degree. The CTE has a full time staff person, Josh Potter, who provides support to faculty and departments on assessment practices. [CUSA had Joshua Potter meet with us independently to see how our work is done.] He offers regular workshops and consultations. Because this position was unfilled last fall after the previous staff person left, we were able to use the shrinkage from the salary to fund a program to support a Documenting Learning Collaborative this summer and in the coming year. It includes teams from four humanities departments in CLAS and is designed to support some intense work over the summer and across the coming year on their degree-level assessment. The CTE has also been hosting a university-wide yearly event, the Student Learning Symposium, as part of our work on assessment.

**Related activities.** The CTE also just received a new NSF grant to help departments adapt and implement improved methods for evaluating faculty teaching. The framework for evaluating teaching could be instrumental in documenting and rewarding faculty work that contributes to things like student learning and success. The CTE has also been working with DeAngela Burns-Wallace to look at faculty roles in student retention. One of the products the CTE is a “map” of faculty-related efforts and initiatives aimed at improving retention and graduation. The major challenge is that CTE is a small unit in terms of FTE, so it is spread very thin. Also, the postdoc program is winding down -- this is the last year of funding -- and the CTE needs a “Phase 2” program to help sustain the work in those departments and keep the momentum up on campus more broadly. That program has been a huge catalyst for the work the CTE has been doing on course transformation.

Appendix A

# 2016-2017 WORKING DRAFT

College of Liberal Arts and Sciences

Committee of Undergraduate Studies and Advising

Subcommittee on Policy and Awards

Working Draft of Proposals for Changes in the KU Core Requirements for Quantitative Literacy and the College B.A. Requirement for Quantitative Reasoning

(straight text = current policy; bold text = changes; italics = commentary)

*The KU Core and the College B.A. requirements, prerequisites, policies, and procedures for quantitative literacy and quantitative reasoning, respectively, are myriad and complex. CUSA, thus, recognizes (a) that no single proposal may assure that the requirements are met in as seamless and timely fashion as preferred and (b) that any one of its multiple proposals may raise objections. CUSA's proposals are proposals in progress; they may not be its final proposals. They are based on several considerations, but these may not be CUSA's final considerations. At present, the considerations include:*

- *Retaining the rigor of the KU Core requirements for quantitative literacy and the College's B.A. requirements for quantitative reasoning.*
- *Retaining the College's two-course requirement for quantitative reasoning. Currently, the requirement is MATH 101 and an elective course with MATH 101 as its prerequisite.*
- *Recognizing the Math department's diligence in expanding and creating alternative sections of MATH 002 and MATH 101.*
- *Expanding and creating more alternative sections of MATH 002 and MATH 101 and allowing more time to complete them. .*
- *Expanding and creating non-math courses in the College that meet the MATH 101 requirement. This is in the spirit of "teaching quantitative reasoning across the curriculum."*
- *Creating alternative non-math courses in the College that meet the Math elective requirement, but that do not require MATH 101 as a prerequisite. This is also in the spirit of "teaching quantitative reasoning across the curriculum."*
- *Recognizing that admitting students to KU who do not have the prerequisites to succeed in Math 002 (e.g., an ACT score below 16) is inconsistent with KU's educational and ethical standards.*

## **Proposal A: Changes in Early & Continuous Enrollment in the Quantitative Literacy**

### **Current Early & Continuous Enrollment in English and Math Requirements**

Undergraduate students enrolled in the College of Liberal Arts and Sciences are expected to make timely progress towards completing their degree requirements. In an effort to have students remain compliant with the requirements of the KU Core and the College, students are required to complete the Written Communication and Quantitative Literacy requirements of both the KU Core and their degrees within the first year of undergraduate study.

Quantitative Literacy. Students are expected to meet the requirement of Goal 1, Learning Outcome 2 of the KU Core in their first year of study. Students should pay close attention to their degree specific requirements (such as for the Bachelor of Arts) given that certain degrees require specific Goal 1, Learning Outcome 2 courses to meet both KU Core and degree-specific requirements. To ensure compliance with this policy, students may be administratively registered for courses if the College determines that they are not on track to complete this requirement in the first year of study. If a student is found to be in non-compliance with this policy, the College retains the right to place a hold on their records to prevent future registrations.

### **Proposed Early & Continuous Enrollment in the Quantitative Literacy Requirement**

Undergraduate students enrolled in the College of Liberal Arts and Sciences are expected to make timely progress towards completing their degree requirements. In an effort to have students remain compliant with the requirements of the KU Core and the College, students are required to complete the Written Communication and Quantitative Literacy requirements of both the KU Core and their degrees within the first academic year of their enrollment, plus the preceding and succeeding summer sessions.

*Including summer sessions will allow students to adjust to KU's expectations, allay some math anxiety, and complete the quantitative literacy requirement without putting their sophomore status and financial aid in jeopardy. This may also decrease the number of DFW grades. This might be done by the fall.*

Quantitative Literacy. Students are expected to meet the requirement of Goal 1, Learning Outcome 2 of the KU Core in the first academic year of their enrollment, plus the preceding and succeeding summer sessions. Students who are required to complete preparatory coursework before being eligible to enroll in a KU Core Goal 1, Learning Outcome 2 course are expected to enroll in it by the second semester of their first year and complete the KU Core Goal 1, Learning Outcome 2 course by the end of the first semester of their second year.



*Including summer sessions and a third semester will allow students to adjust to KU's expectations, allay some math anxiety, and complete the quantitative literacy requirement without putting their sophomore status and financial aid in jeopardy. This may decrease the number of DFW grades. This might be done by the fall.*

To ensure compliance with this policy, students may be administratively registered for courses if the College determines that they are not on track to complete this requirement after their first semester. If they are not in compliance with this policy, the College retains the right to place a hold on their records to prevent future registration [the contingencies need to be more specific]

*Alternatively, administrative registering for courses might be dropped completely, in which case the preceding paragraph would become:*

If students are not in compliance with this policy, the College retains the right to place a hold on their records to prevent future registration [the contingencies need to be more specific]

*Administratively registering (i.e., pre-enrolling) students in math courses in their first semester may not give them enough time to become accustomed to KU's expectations and allay some math anxiety, both of which may increase the number of DFW grades. Administratively registering them should not begin until their second semester, if at all. This might even out overall student enrollments in MATH 002 and MATH 101 across the fall and spring semesters because some students will wait until the spring to enroll in them. This might be done by the fall.*

*The first time students enroll in MATH 002 or MATH 101, the Math department will not let them withdraw until after the 50% tuition refund date has passed (e.g., February 15, 2017) unless they meet with a Math advisor and petition to withdraw. Petitions are granted for emotional issues, academic status, accommodations, and not having had math in a while. This may put their progress to sophomore status and financial aid in jeopardy, increase math anxiety, and increase the number of DFW grades, especially if no alternatives to their first math course are available until the next semester (e.g., switching to enhanced sections, alternative content, tutorials, online classes, see below). Students should be allowed to withdraw from any math course at any time. This might be done by the fall.*

*However, as noted above, students need alternative courses (e.g., sections, content, tutorials, online classes) to maintain their math skills between withdrawing from their first math course and their next math enrollment if they are to complete their quantitative requirements in a timely fashion. Alternatives during the semester in which students withdraw might include:*

*Having students switch to alternative sections, for instance, to enhanced sections (i.e., meeting five days a week and including material from*

*MATH 002 and MATH 101) or sections using less abstract, more applied content (e.g., “data driven,” problem solving). This might be done by the fall.*

*Having students enroll in online math courses -- abstract or applied – of variable credit for variable weeks (e.g., four-week and eight-week courses). See, for instance, the Assessment and LEarning in Knowledge Spaces (ALEKS) (see <https://www.aleks.com/highered/math>) or the NROC Project (Network Resources Open College & Career at <http://thenrocproject.org/#/>). These courses would not be alternatives to MATH 002 or MATH 101 – unless they might be -- but they would fill the gap between withdrawing from math one semester and enrolling in it again the next semester. It could also provide prerequisites that might reduce the number of DFW grades in their next enrollment. This might be done by the fall.*

*Their next enrollment in math might include alternatives such as:*

*Having students enroll in an enhanced section of MATH 101. These sections reportedly have lower DFW rates than those in MATH 002 and non-enhanced MATH 101. Indeed, having students enroll in them in the first place – instead of MATH 002 – might be more effective and, ultimately, less expensive for them and the College. If this reduced the number of MATH 002 sections, then expanding the number of the enhanced MATH 101 sections might be revenue neutral. However, the enhanced sections are taught by faculty members, not graduate students, who teach MATH 002. This would increase the cost of each section. In the fall 2017, Math is expanding the number of its enhanced sections from four to eight. More sections might be added by the fall.*

*Increasing the number of alternative sections of MATH 101 that are more applied (e.g., “data driven,” problem-solving) would reduce the number of purely abstract sections and, thus, be revenue neutral. This might be done by the fall.*

*These enhancements and alternatives might enhance students’ quantitative skills and reduce some math anxiety, and thereby reduce the number of DFW grades in meeting KU’s and the College’s requirements for quantitative literacy and reasoning, respectively.*

Students should pay close attention to the degree-specific requirements and the requirements in their majors. Some degrees and majors require specific Goal 1, Learning Outcome 2 courses to meet the KU Core, degree-specific, and major and minor requirements (i.e., in Bachelors of Science and some Bachelors of Arts degrees).

*This provides fair warning about degree-specific and major requirements. This might be clarified by the fall.*

## **Proposal B: Change in the College B.A. Degree-Specific Elective Requirement in Quantitative Reasoning**

Current College B.A. Degree Required Elective in Quantitative Reasoning:

Quantitative Reasoning. 3 credits. This course must have MATH 101 (College Algebra) or a higher mathematics course as a prerequisite. Additionally, this course must also be either approved for Goal 1, Learning Outcome 2 of the KU Core or another course approved by CUSA.

Proposed College B.A. Degree Required Elective in Quantitative Reasoning:

Quantitative Reasoning. 3 credits. A Math course beyond MATH 101 or a non-Math course with or without MATH 101 as a prerequisite, as approved by CUSA. Students should pay close attention to the degree-specific requirements and the requirements in their majors. Some degrees and majors require specific Goal 1, Learning Outcome 2 courses to meet the KU Core, degree-specific, and major and minor requirements (i.e., in Bachelors of Science and some Bachelors of Arts degrees).

*Departments that require MATH 101 as a prerequisite for courses in quantitative reasoning should consider whether MATH 101 is a necessary prerequisite. If not, then the prerequisite could be dropped. This will require CUSA and CAC approval for course changes and changes in majors that can begin.*

*Not requiring MATH 101 as the prerequisite for the College's B.A. elective requirement in quantitative reasoning will allow students to complete their major and minor requirements in a timelier manner. This will require changes in the College B.A. degree requirement that cannot be made by next fall, but they can begin.*

*Allowing non-Math courses to satisfy the elective requirement in quantitative reasoning would increase the number of alternative courses in other departments. These might include some, but not all, advanced courses in statistics, quantitative analysis, mathematical and computer modeling, and logic. Just as KU values "writing across the curriculum," so too should it value "quantitative reasoning across the curriculum." This will require changes in the College B.A. degree requirement that cannot be made by next fall, but they can begin.*

*Given the change in the Math elective requirement, departments that remove MATH 101 as a prerequisite for a course in quantitative reasoning might revise the course, if necessary, and submit it to CUSA for approval as a course that satisfies the B.A. Math elective requirement in quantitative reasoning. This will require CUSA and CAC approval of courses that meet the requirement.*

*Given the change in the Math elective requirement, departments that do not have courses in quantitative reasoning might develop ones that satisfy the B.A. Math*

*elective requirement in quantitative reasoning. This will require CUSA and CAC approval of new courses that meet the requirement.*

*The prerequisite for a non-Math elective course in quantitative reasoning might be MATH 002, a specific ACT or Math placement test score, admission to the major, or other requirement, as determined by the department. This will require CUSA and CAC approval for courses that meet the requirement.*

### **Proposal C: Change in the College B.A. Degree-Specific Requirement for Quantitative Reasoning**

#### **Current B.A. Degree Requirement:**

*Quantitative reasoning. 3 credits. MATH 101 or higher is the College's B.A. requirement for quantitative reasoning. It also fulfills the KU Core Goal 1, Learning Outcome 2 for Quantitative Literacy. Fourteen other Math and Natural Science courses also fulfill the KU Core Goal 1, Learning Outcome 2, usually at the 100- and 200-level, but MATH 101 is their prerequisite. So, by default, MATH 101 or higher is required for the College B.A. degree-specific requirement in quantitative reasoning.*

*Three College courses other than MATH 101 also fulfill the KU Core Goal 1, Learning Outcome 2 for Quantitative Literacy: Communications (COMS) 356 Introduction to Behavioral Research in Communications (prerequisites: MATH 101 and admission to major), Political Science (POL) 306 Political Science Methods (prerequisites: POL 110, 150, or 170; no Math), and Public Administration (PUAD) 332 Quantitative Methods in Public Administration (prerequisite: MATH 101 or equivalent).*

*Three Business School (BUS) courses fulfill the KU Core Goal 1, Learning Outcome 2 for Quantitative Literacy: Accounting (ACCT) 200 Fundamentals Financial Accounting (prerequisite: none), Finance (FIN) 101 Personal Finance (prerequisite: none), and Finance (FIN) 310 Personal Finance (prerequisites: ACCT 200 and other BUS courses). FIN 101 currently satisfies the College B.G.S. degree requirement for quantitative reasoning.*

#### **Proposed B.A. Degree Requirement:**

*Quantitative reasoning. 3 credits. MATH 101, a Math course with MATH 101 as the prerequisite, or a non-Math course approved by CUSA. This requirement fulfills the KU Core Goal 1, Learning Outcome 2 for quantitative literacy.*

*With non-Math courses fulfilling the B.A. requirement, students will be able to complete the requirement and graduate in a more timely manner. These might include some, but not all, courses in statistics, quantitative analysis, mathematical and computer modeling, and logic. Just as KU values "writing across the curriculum," so too should it value "quantitative reasoning across the curriculum." This proposal will require changes in*

*the College B.A. degree requirements that cannot be made by next fall, but they can begin.*

**Proposal D: Change in College B.G.S Degree-Specific Requirements for Quantitative Reasoning**

Quantitative reasoning. 3 credits. MATH 101, a Math course with MATH 101 as a prerequisite, or non-Math alternatives approved by CUSA. This requirement fulfills the KU Core Goal 1, Learning Outcome 2 in quantitative literacy.

*With non-Math courses fulfilling the B.G.S. requirement, students will be able to complete the requirement and graduate in a more timely manner. Moreover, the College may attract more B.G.S students to College courses in quantitative reasoning than the non-College courses (e.g. FIN 101). Even more students would be attracted if FIN 101 was removed as an alternative for this requirement. These proposals would return lost student credit hours to the College and allow it to support more Math alternatives to MATH 002 and MATH 101 (e.g., enhanced sections, different content, online courses). Just as KU values “writing across the curriculum,” so too should it value “quantitative reasoning across the curriculum.” These proposals will require changes in the College B.G.S. degree requirements that cannot be made by next fall, but the changes can begin now.*

**Proposal E: Change in the KU Core Goal 1, Learning Outcome 2 requirement for quantitative literacy**

Quantitative reasoning. 3 credits. MATH 101, a Math course with MATH 101 as a prerequisite, or a non-Math course approved by the UCCC.

*With more non-Math courses in the College fulfilling the KU Core Goal 1, Learning Outcome 2 requirement, students will be able to complete KU Core requirement and graduate in a more timely manner. Just as KU values “writing across the curriculum,” so too should it value “quantitative reasoning across the curriculum.” These proposals will require changes in the KU Core requirements that cannot be made by next fall, but the changes can begin now.*