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| **Course Submitted**  **(Subject/Number/Title)** |  |
| **Submitted by**  **(Name/Department)** |  |
| **Department/Unit Oversight Note** | It is the responsibility of the department or unit (1) to keep a copy of this finalized worksheet together with the approved sample syllabus and/or syllabus template and (2) to pass along all relevant documents to additional instructors who will teach the course in the future.  ☐Check here if you, as an instructor within a department or unit, understand and have confirmed that your supervisor is aware of this Core request stated above. |

| **Ways of Thinking: Quantitative Reasoning** | | | **Core Requirement** |
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| **Core component title** | Varies | | |
| **Minimum credit hours** | 3 | | |
| **Core-specific pre- and co-requisites / requirements** | Should be completed during a student’s first 45 credit hours at SLU | | |
| **Core component summary** | Courses that satisfy the Quantitative Reasoning requirement introduce students to the ubiquity of quantitative data, theories, and applications.  In these courses, students attain a breadth and depth of mathematical and/or statistical skill sets that allows them to assess quantitative information in order to develop rigorous arguments and communicate reasoned conclusions. | | |
| **Notes** | * A MATH designated course must be above the level of MATH 1200 * Quantitative Ways of Thinking courses must develop students’ skills in **at least one** of three broad areas:  1. The manipulation, understanding, and recognition of patterns of symbols and numbers, which can then be applied to advanced numerical problems and quantitative courses in any area/discipline 2. Statistical analysis and communication and interpretation of that analysis 3. The ability to recognize the ubiquitous nature of numerical evidence and our civic responsibility to evaluate and communicate about numerical evidence within societal, national, and/or global contexts  * Courses that meet the learning outcomes and essential criteria for this component may be submitted from any department or program | | |

**All courses approved to count for University Core requirements must include both course-level and Core-level student learning outcomes on their syllabi. Please follow this link for mandatory syllabus material to be incorporated into your syllabus:**

[**Mandatory Syllabus Material for University Core Courses/Experiences**](https://drive.google.com/file/d/1a-aCDgUyGtfEYq-UT4Ns0VKbavDK1anK/view)

The Saint Louis University Core is an academic program intentionally structured to facilitate student achievement of both holistic and component-level student learning outcomes (SLOs). [SLU’s Course Syllabus Policy](https://www.slu.edu/provost/policies/academic-and-course/policy-course-syllabus.pdf) requires that learning outcomes appear on all syllabi. Below, you will find a table with the University Core and Core Component SLOs indicated. Please copy the boilerplate below and insert it into the syllabus you upload to CourseLeaf for review by the University Undergraduate Core Committee (UUCC).

\*\*Please note: If this course meets more than one Core Component Area requirement, please modify accordingly

**Ways of Thinking: Quantitative Reasoning**

This course is part of the Saint Louis University Core, an integrated intellectual experience completed by all baccalaureate students, regardless of major, program, college, school or campus. The Core offers all SLU students the same unified approach to Jesuit education guided by SLU’s institutional mission and identity and our nine undergraduate [Core Student Learning Outcomes](https://www.slu.edu/core/faculty-resources/core-student-learning-outcomes.php) (SLOs).

| **Ways of Thinking: Quantitative Reasoning** is one of 19 Core Components. The University Core SLO(s) that this component is designed to intentionally advance are listed below: |
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| **University Core Student Learning Outcomes**  The Core SLO(s) that this component is intentionally designed to advance are: |
| SLO 2: Integrate knowledge from multiple disciplines to address complex questions |
| SLO 3: Assess evidence and draw reasoned conclusions |
| SLO 4: Communicate effectively in writing, speech, and visual media |

| Additionally, the Core Component-level Student Learning Outcomes are listed below: |
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| **Component-level Student Learning Outcomes**  Students who complete this course will be able to: |
| * Demonstrate a breadth and depth of mathematical and/or statistical skills needed to analyze and build quantitative models |
| * Recognize and understand patterns and arguments found in mathematics and/or statistics |
| * Recognize the pervasiveness and myriad forms of mathematics and/or statistics which have aided in human and humane progress |
| * Communicate effectively in mathematical and/or statistical ways by forming arguments and conveying results obtained through the application of quantitative tools |

| **Core Component Learning Outcomes** | |  |
| --- | --- | --- |
| **Below, you will find listed the 4 course-level student learning outcomes associated with this Core component area.** | ***In the space provided, please provide examples of readings, assignments, and/or activities that demonstrate how this course is designed to facilitate student achievement of these outcomes.*** | |
| * Students will be able to demonstrate a breadth and depth of mathematical and/or statistical skills needed to analyze and build quantitative models   ☐Check here if submitting UUCC requested revisions | How will you ensure that the primary focus of this course will be quantitative reasoning?  How will this course foster students’ development of a significantly broad and deep skill set used in quantitative reasoning (e.g.: basic statistical, probabilistic, and/or mathematical computations)? | |
| * Students will be able to recognize and understand patterns and arguments found in mathematics and/or statistics   ☐Check here if submitting UUCC requested revisions | How will this course require students to evaluate quantitative information and evidence, including its representation in forms such as charts, graphs, equations, and/or statistics obtained from data?  How will this course engage students in the construction, use, and application of mathematical or statistical modeling of numerically based information? | |
| * Students will be able to recognize the pervasiveness and myriad forms of mathematics and/or statistics which have aided in human and humane progress   ☐Check here if submitting UUCC requested revisions |  | |
| * Students will be able to communicate effectively in mathematical and/or statistical ways by forming arguments and conveying results obtained through the application of quantitative tools   ☐Check here if submitting UUCC requested revisions | How will this course teach students to accurately explain information presented in mathematical or statistical forms?  How will you design an artifact that demonstrates student achievement of the component outcomes? | |

| **Core SLO(s) (**[**Click here for more information on Core SLO’s**](https://drive.google.com/file/d/15qtYvj1085Y8OHJ8GRkxzRW2w-H_t6FU/view)**)** | |  |
| --- | --- | --- |
| **This course/experience is part of an integrated university-wide Core curriculum designed to facilitate student achievement of SLU’s nine University Core SLOs. Below, you will find listed the 3 University Core-level student learning outcomes associated with this Core component area.** | ***In the space provided, please provide examples of readings, assignments, and/or activities that demonstrate how this course is designed to facilitate student achievement of these 3 outcomes at the levels indicated.*** | |
| **SLO 2: Students will be able to integrate knowledge from multiple disciplines to address complex questions (Introduce)**  ☐Check here if submitting UUCC requested revisions |  | |
| **SLO 3: Students will be able to assess evidence and draw reasoned conclusions (Develop, Achieve)**  ☐Check here if submitting UUCC requested revisions |  | |
| **SLO 4: Students will be able to communicate effectively in writing, speech, and visual media (Introduce)**  ☐Check here if submitting UUCC requested revisions |  | |