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| **Course Submitted****(Subject/Number)** |  |
| **Submitted by** |  |

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| **Ways of Thinking: Natural and Applied Sciences** | **Core Requirement** |
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| **Core component title** | Varies |
| **Minimum credit hours** | 3 |
| **Core-specific pre- and co-requisites / requirements** | N/A |
| **Core component summary** | Courses that satisfy the Natural & Applied Sciences requirement foster students’ understanding of modes of inquiry used to study structures and mechanisms of the universe. In these courses, students develop an understanding of scientific laws, principles, and theories as well as methods to test empirical claims. These courses give students the tools to evaluate claims about the natural and physical world and/or to apply scientific reasoning to real-world problems. |
| **Notes** | * Courses that fulfill this requirement develop students’ ability to engage in methods of interpretation central but not limited to disciplines centered around natural science, engineering, computer science, medicine, and technology
* Courses that meet the learning outcomes and essential criteria for this component may be submitted from any department or program
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**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://sites.google.com/slu.edu/university-core-pilot/instructor-resources/mandatory-core-syllabus-boilerplate?authuser=1)

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| **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 your course is designed to facilitate student achievement of these outcomes.*** |
| 1. Students will be able to acquire knowledge of the world through a scientific discipline (natural or applied sciences)

[ ] Check here if submitting UUCC requested revisions |  |
| 1. Students will be able to express how scientific disciplines approach complex questions

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| 1. Students will be able to use scientific thinking to draw conclusions about multidimensional problems

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| 1. Students will be able to assess data used to make evidence-based decisions

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| **Course Essential Criteria** |  |
| **Below, you will find listed the 3 Essential Criteria for this Core component.** | ***In the fields below, please note these Essential Criteria (what all instructors must do/teach/assign/require to ensure the integrity of each section University-wide) and in the spaces provided, please provide examples of readings, assignments, and/or activities that demonstrate how your course will incorporate these Essential Criteria.*** |
| 1. Courses will teach students about—and require students to engage in—the different ways of thinking through which scholars study and apply scientific principles to answer questions about the structure and behavior of the natural world or engineering, medical, or computer science applications

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| 1. Courses will introduce the students to how the scientific method, scientific inquiry, or the engineering design process is applied to a topic, question, or problem

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| 1. Courses will introduce methods for assessing the validity/quality of the data used in scientific thinking and especially the limits on what can be decided from a given set of data

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| **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 2 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 your course is designed to facilitate student achievement of these 2 outcomes at the levels indicated.*** |
| **SLO 2: Students will be able to integrate knowledge from multiple disciplines to address complex questions (Develop)**[ ] Check here if submitting UUCC requested revisions |  |
| **SLO 3: Students will be able to assess evidence and draw reasoned conclusions (Develop)**[ ] Check here if submitting UUCC requested revisions |  |