



## **IDS1911 | Interdisciplinary Undergraduate Research | 1.00 credit**

### **Course Description**

This undergraduate course provides students in all disciplines and majors with transformative learning experiences and immersion in hands-on research. By engaging in collaborative, real-world projects, students address challenges that require the acquisition, analysis, and synthesis of knowledge from multiple disciplines. The course equips participants with leadership skills, cultural competence, and an understanding of sustainability and ethical research practices. Students adopt research methodologies while applying both qualitative and quantitative techniques to practical problems. This approach not only enhances their analytical capabilities but also fosters critical thinking and decision-making skills, crucial for future leaders. Through this immersive experience, students learn to bridge the gap between theoretical concepts and real-world applications, preparing them for the multifaceted challenges of the modern professional landscape. **Note:** *This course prepares students for continued studies, ensuring the successful transition to four-year and graduate institutions.*

### **Course Competencies:**

#### **Competency 1: The student will develop research skills by:**

- Conducting literature reviews for research purposes.
- Applying research methodologies.
- Implementing data collection techniques.
- Analyzing datasets using statistical software.
- Synthesizing findings from multiple disciplines.
- Presenting research results through various media.
- Critically evaluating research ethics and integrity.

#### **Competency 2: The student will enhance leadership capabilities by:**

- Developing collaborative research projects.
- Practicing effective communication strategies.
- Evaluating and seeking solutions to research topics.
- Facilitating tasks and responsibilities efficiently.
- Navigating progress to achieve research objectives.
- Adapting leadership styles to different situations.
- Demonstrating emotional intelligence in varied contexts.

#### **Competency 3: The student will cultivate cultural competence through:**

- Engaging with diverse perspectives and backgrounds.
- Analyzing cultural influences on research practices.
- Utilizing culturally sensitive research protocols.
- Practicing inclusive communication techniques.
- Recognizing and mitigating personal biases.
- Fostering an inclusive collaborative environment.
- Adapting research approaches for different cultural contexts.

#### **Competency 4: The student will apply sustainability principles by:**

- Assessing environmental impacts of research activities.
- Integrating sustainable practices into project design.

- Evaluating long-term implications of research outcomes.
- Proposing eco-friendly research methodologies.
- Proposing solutions for sustainable resource management.
- Analyzing sustainability challenges across disciplines.
- Incorporating circular economic concepts into research.

**Competency 5: The student will enhance ethical decision-making skills by:**

- Identifying ethical dilemmas in research scenarios.
- Applying ethical frameworks to research questions.
- Evaluating potential consequences of research decisions.
- Applying strategies for responsible data management.
- Implementing transparent research practices.
- Navigating ethical considerations in collaborative projects.
- Advocating ethical standards in research communities.

**General Education Learning Outcomes**

- Solve problems using critical and creative thinking and scientific reasoning
- Formulate strategies to locate, evaluate, and apply information
- Demonstrate knowledge of diverse cultures, including global and historical perspectives