# APPLICATION FOR INTERDISCIPLINARY (ID) DESIGNATION WITHIN THE MAGIS CORE CURRICULUM 

## SINGLE COURSE

## (Individual or Team Taught)

## The approved learning outcomes for the Interdisciplinary (ID) element of the core:

"An Interdisciplinary Experience will satisfy the following learning outcomes:
I. Synthesize or draw conclusions by connecting examples, data, facts, or theories from more than one perspective or field of study.
II. Meaningfully synthesize connections among experiences outside of the formal classroom (e.g., life experiences, service learning, study abroad, internship) to deepen understanding of fields of study and to critically examine their own points of view.
III. Adapt and apply skills, theories, or methodologies across disciplines to explore complex questions and address problems."

1. Date Submitted: _11/19/18_. We consider applications on a rolling basis but to ensure a decision in time for the course to received designation prior to a given semester, please submit by September 1 for the Spring Semester and September 1 for the Fall Semester.
2. Instructor(s): Jim Biardi
3. Course Prefix, Number \& Title (e.g. PO 232): BI $0076 / \mathrm{CH} 0076$
4. Is this application only for the sections of this course that you will teach? $\qquad$ Or will every section of this course count as an Interdisciplinary (ID) course? $\qquad$ (Please check one.)
5. Is this course already in the University Catalogue?

Yes _X_No $\qquad$ . If No, where is it in the review process?
6. Have you participated in a course or professional development program (e.g. at CAE) relevant to teaching an ID course (doing so is not required)? Yes $\qquad$ No__X__ If yes, please describe it in 200 words or less.
7. Courses that fulfill the ID element of the Magis Core Curriculum can also count for one but not two of the requirements in the "Orientation" or "Exploration" elements (see the next page). If this course is/will be cross-listed in two departments, in which Exploration element and department will it count? _Natural Sciences/Biology_ (E.g. Humanities/Religious Studies, Natural Sciences/Biology, Social Sciences/Economics, etc.) _BI and CH _
8. Please provide the approved/proposed Catalog Description for the course:
"The science of the environment is presented through examination of the interconnections among physical, chemical, and biological fields of inquiry. This course looks at how the global environment
is altered by the human population, technology, and production of fuels and food. In this course, students will acquire a scientific understanding of current issues in environmental science and learn to evaluate claims about current environmental problems. Note: This course counts as a natural science core but does not satisfy requirements for the biology or chemistry major or minor.
9. Please describe how your course will meet the approved learning outcomes for the Interdisciplinary (ID) element of the Core, how some of the content and pedagogies that you will use to meet these goals, and how you will evaluate students' fulfillment of these goals.

| Learning Outcome | Pedagogy and Course Content that Will Prepare Students to Meet This Outcome | Evaluation of Students’ Fulfillment of This Outcome |
| :---: | :---: | :---: |
| ID SLO I | 1. CMI Climate Stabilization project <br> 2. Precautionary principle for environmental policy (ozone, POPs, cleaning agents) <br> 3. Environmental toxins/pollution; distribution, biological impact, chemical structural relationships <br> 4. Ionizing radiation as a biological hazard (UV, radioactive waste) <br> 5. Climate change and energy relationships | 1. 'Wedge' strategy and class presentation (CMI project) <br> 2. Exam questions, homework <br> 3. Exam questions, homework; case study on PCBs in the nearctic <br> 4. Exam questions, homework <br> 5. Exam questions, homework |
| ID SLO II | 1. Two required co-curricular activities (seminars, events, volunteer on citizen science project) <br> 2. Environmental data collection and analysis; SimBio simulation labs | 1. Photo documentation or short response on Bb <br> 2. Class assignment and group project |
| ID SLO III | 1. Ecosystem services as a foundation for sustainable societies <br> 2. Environmental justice issues in exposure to hazard/benefits of healthy environment | 1. Homework assignments; exam questions; case studies in class meetings <br> 2. Short answer/essay questions on midterm and final exam |

10. Please attach the approved/proposed/existing course syllabus. Please highlight the following in yellow:

- A brief statement (one or three sentences) that notes how the course addresses and fulfills the Interdisciplinary element of Core. This can be part of the course description or included as a separate category.
- Brief statements of how the course engages the approved ID learning outcomes. (E.g., `As a result of their work in this course, including... students will...)


## Magis Core Curriculum

## 1. Orientation (7 courses):

- English (Composition \& Rhetoric); Religious Studies; Philosophy; History; Math; Modern/Classical Language; 1 additional course in either Mathematics or Modern/Classical Language

2. Exploration (8 courses)

- Humanities:
- Religious Studies / Philosophy / History (2 courses in 2 different departments)
- English / Modern Languages and Literatures / Classics (1 course in Literature)
- Visual and Performing Arts (1 course)
- Natural Sciences: Biology / Chemistry and Biochemistry / Physics (2 courses)
- Social \& Behavioral Sciences: Sociology \& Anthropology / Psychology / Economics / Politics / Communication (2 courses)


## 3. Signature Elements

- Interdisciplinary element (1 course): either a team-taught course, or a cluster course, or an individually taught course (with at least one instructor in the College of Arts and Sciences). (All courses within the Orientation and Exploration areas.)
- Social Justice element ( 3 courses): one course providing an introduction to social justice (SJ1), and two additional social justice courses (SJ2), at least one of which accomplishes the learning outcomes through a focus on race (broadly construed), studied intersectionally with gender and class (SJ1 and one SJ2 course fulfilled within the Orientation and Exploration areas. One SJ2 course fulfilled within either the Orientation and Exploration areas or within a Major.)
- Writing Intensive element ( 3 courses): two courses (within the Orientation and Exploration areas) plus one additional course fulfilled within either the Orientation and Exploration areas (Writing across the Curriculum) or within a Major (Writing in the Disciplines).

