

INTERDISCIPLINARY (“INT”) Courses: A Handbook to Guide Proposals

Curriculum & Academic Policies Council (CAPC), West Chester University

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PREFACE

We offer this document to help you design courses for the [Interdisciplinary \(INT\)](#) requirement of [West Chester University's General Education Program](#). In what follows, you will find a definition of interdisciplinarity and what constitutes an Interdisciplinary course at WCU, an explanation of why interdisciplinarity matters for our students and their education, and how to ensure that your course meets the requirements for an Interdisciplinary course. We conclude with a checklist to help you in your efforts.

WHAT?

The Interdisciplinary general education requirement is designed to provide students with the skills to think across the disciplines and make connections between them. Students will leave an Interdisciplinary course understanding how to better investigate a topic, address a problem, or challenge conventions by drawing on the scholarship and methods of multiple disciplines. They will understand why the various disciplines they learn throughout their college career cannot exist in silos but must be integrated to solve the biggest and smallest issues we face.

The best way to understand our purpose in assigning students an Interdisciplinary requirement is through the idea of the Renaissance, learning a bunch about a bunch of subjects so you can answer the big questions of the day, fix problems facing society, and create, well, new things. This is what our general education curriculum is all about and Interdisciplinary courses are designed to show students how to put their new knowledge to use. By understanding their college education interdisciplinarily, students will lay the foundation for a lifetime of learning.

To achieve this, students study various disciplines and then integrate them to address an issue (Moran, 2010, p. 2). Deborah DeZure (2017) explains how this impacts classroom learning: “Interdisciplinary outcomes for student learning focus on solving complex problems that are too broad to be addressed through a single disciplinary lens.” It requires the ability to “tolerate ambiguity and complexity” that belong within disciplinary frameworks as well as transcend them (DeZure, 2017). This requires a multitude of skills that can best be labeled as *integrative* (Klein, 2017). According to DeZure (2017):

Significant knowledge within individual disciplines serves as the foundation, but integrative learning goes beyond academic boundaries. Integrative experiences often occur as learners address real-world problems, unscripted and sufficiently broad to require multiple areas of knowledge and modes of inquiry, offering multiple solutions that benefit from several perspectives.

Interdisciplinary courses, therefore, must focus on a topic that requires the contribution of more than one discipline. **It is not enough, however, for an Interdisciplinary course to simply draw on two or more disciplines. The course must show students *how* interdisciplinarity works.**

Interdisciplinary courses **must also avoid simply comparing disciplines**. This is what we would call multidisciplinary, which Julie Thompson Klein (2017) defines as comparing or juxtaposing different disciplines. Multidisciplinarity provides an understanding of the various disciplines, but stops short of integration. Thus, “disciplines remain separate, retain their original identity, and are not questioned” (Klein, 2017). Klein argues that many projects and curricula that claim to be interdisciplinary are

actually multidisciplinary in that they fail to organize around a theme, question, or problem. While it is helpful to use one discipline to support a primary discipline in addressing a topic—i.e. using history to provide context for a philosophical study or vice versa—this approach fails to fully integrate the two disciplinary approaches (Klein, 2017).

DeZure (2017) expands on this:

Many faculty use the term “interdisciplinary learning” variably and loosely to mean: (1) multidisciplinary learning outcomes that engage students in the study of two or more disciplinary perspectives on a problem or phenomenon without producing an integrated analysis or solution, (2) cross-disciplinary learning in which one discipline is used in the service of another, or (3) protodisciplinary outcomes that enable students to draw on resources without knowledge of the disciplinary modes they represent.

In an interdisciplinary approach, the various disciplines might, and perhaps should, blur together, making it hard to make out where, say, in a course on effective communication of STEM, the analysis of English composition ends and the analysis of scientific information begins. However, students should be aware of the disciplines at play and develop an understanding of the contributions by those disciplines. In other words, interdisciplinary study should lead to a stronger understanding of traditional disciplines (DeZure, 2017).

To summarize: an Interdisciplinary course is built around a large topic with two or more disciplines coming together to address the topic (solve a problem, understand a complex issue, complicate disciplines or ideas, etc.). Use of these disciplines must be integrative and not siloed. An Interdisciplinary course must also make clear to students how interdisciplinarity functions in the course and why interdisciplinary approaches are important for their students and future careers.

Note: Because Gen Ed Distributive courses are designed to teach students to problem-see and problem-solve through specific disciplinary lenses, by definition a course which meets a distributive requirement may not also qualify as an Interdisciplinary course.

WHY?

We require that students learn about interdisciplinarity to help them develop skills for advanced problem solving, collaboration, and communication. DeZure (2017) notes that efforts to improve education in fields like STEM, health sciences, and doctoral studies have “echoed employers’ calls for graduates with integrative and interdisciplinary skills to solve unscripted, real-world problems that invite and require interdisciplinary and team-based solutions.”

Robert Frodeman (2017) argues that “interdisciplinarity consists of not only the study of how to integrate various kinds of disciplinary knowledge—call this the epistemic task—but just as much the analysis of the challenges surrounding effective communication to different audiences—call this the political and rhetorical element.” In other words, we do interdisciplinary work to build knowledge but also to communicate effectively with those outside of our disciplines and outside of the academy. He goes on to say: “the point of interdisciplinarity is fundamentally rhetorical in nature: to figure out how to relate disciplinary expertise to the needs of the community while protecting the academic from [the negative consequences of speaking truth to power].”

Imagine how much more effective health care providers would be at communicating during a health crisis if they understood their discipline through the lens of, say, sociology or, perhaps, rhetoric. Would the Covid 19 crisis have been as catastrophic had our health care administrators all taken a course on English Composition and Medicine or Cultural Differences and Health Care? We require an Interdisciplinary course because we want to show our students how to integrate their course work and the importance of doing so throughout their lives.

HOW?

The creation of an Interdisciplinary course can be simple and straightforward. You simply need to identify an overarching topic and select two or more disciplines that will address that topic. You must have at least one substantive assignment through which students can demonstrate their grasp of interdisciplinarity. You must show in your course schedule where those disciplines are integrated to address the topic. In short, you should triangulate the course description with the course schedule, learning activities, and assessments to make clear to students where and how they will learn to be an interdisciplinary thinker. The focus on interdisciplinarity should be explicit.

While the various disciplines need not be always simultaneously present, they do need to be *integrated* throughout the course. In other words, you cannot simply address one discipline and then another. You must show how the two (or more) work together, at times simultaneously, to address the topic.

SYLLABUS CHECKLIST

- Provide a clear and prominent statement early in the syllabus that this course is an approved General Education course that meets the Interdisciplinary requirement (INT).
- Identify clearly the two or more disciplines through which the course inquiry takes place.
- The syllabus must identify in the course schedule where and how it will be made explicit to students how interdisciplinarity enhances the study of the course subject.
 - In other words, where/how in the course will it answer the question: Why are we using interdisciplinarity to explore this topic? The goal being to help students better understand how they can apply interdisciplinarity to other areas of study.
- The course schedule should identify multiple occasions where the meaning of interdisciplinarity is markedly engaged and explicated. This is where you will discuss what interdisciplinarity is and how to use it.
- The course schedule should identify multiple occasions that at least two disciplinary subjects will be used to engage the course subject in a substantive way. This is where you will put interdisciplinarity into practice.
- Identify at least one substantive assignment that requires students to integrate two or more of the disciplinary subjects used in the course to engage the course subject.
- State that, as an INT course, the course is designed to help students meet General Education Goals #1 (Communicate effectively), #2 (Think critically and analytically), and #4 (Demonstrate the ability to think across and about disciplinary boundaries).
- Select the Gen Ed SLOs that you will use to achieve each goal. For Gen Ed goals 1 and 2, choose one of the possible SLOs as listed in [the Gen Ed Program](#) for each goal. For Gen Ed Goal 4, address both of the SLOs: (a) Synthesize and/or integrate information and/or approaches from multiple disciplines in the investigation of a concept, culture, or idea, or problem, (b) Demonstrate the ability to appreciate how a given topic is informed and/or influenced by multiple disciplines simultaneously.
- Explicitly link Gen Ed SLOs with their instruction and assessment: i.e., the syllabus must spell out which course artifacts (e.g., which exams, papers, presentations, etc.) provide instruction and assessment of the specific Student Learning Outcomes (SLOs) associated with Gen Ed Goals 1, 2, and 4. Please note that a single artifact can be used to assess more than one SLO; that is, preparers are not obligated to create a separate assignment for each individual SLO, but each SLO must be explicitly aligned with an assessment artifact. (Note, the assessment alignment must be at the SLO and not goal level).
- Provide instruction-and-assessment information for course-specific learning outcomes and, if the course is required by any program, provide such information for program-specific goals as well.

SUBMISSION TO CIM

A complete INT course proposal must (like any CAPC proposal) be submitted to CIM, WCU's web-based course inventory management system. Before submitting your proposal to CIM, you should provide your [Gen Ed Narrative Form](#), syllabus, and any [impact statements](#) (if needed) to any relevant department or program committees for approval. (Note that these forms are also available by clicking on the relevant "?" in the CIM shell). Once these committees approve the proposal, you should submit these materials to CIM (see [CIM instructions](#)). As part of the CIM process, you will be required to upload your materials and fill out a web-based application form and check appropriate boxes, including the box for "Full CAPC review."

Under "Purpose of Course," be prepared to provide brief answers to the questions "What are the proposed changes?" and "Why are the changes being proposed?" In this same section, check "General Education 2019+," which will trigger a box allowing you to define the purpose of the course as "Interdisciplinary Requirement." Clicking on this box will open another box that shows the relevant Gen Ed Goals and learning outcomes for INT courses.

Here you should make sure that the three required Gen Ed Goals for INT courses—Goal #1 ("Communicate effectively"), Goal #2 ("Think critically and analytically"), and Goal #4 ("Demonstrate the ability to think across and about disciplinary boundaries")—are checked. For Goals #1 and #2, keep checked only the SLOs that your course meets, and uncheck any others, keeping in mind that your course needs to address only one of the four SLOs listed under Goal #1 and one of the four SLOs under Goal #2. For Goal #4, however, make sure that both boxes are checked, and that your course addressed them with learning activities and aligned assessments: (a) "Synthesize and/or integrate information and/or approaches from multiple disciplines in the investigation of a concept, culture, or idea, or problem," (b) "Demonstrate the ability to appreciate how a given topic is informed and/or influenced by multiple disciplines simultaneously."

Note on what qualifies as an Interdisciplinary course: Because Gen Ed Distributive courses are designed to teach students to problem-see and problem-solve through specific disciplinary lenses, by definition a course which meets a distributive requirement may not also qualify as an Interdisciplinary course.

Note on the Gen Ed Narrative Form: This form is required for all new or revised INT courses. Please be sure to download the file and save to your own computer to complete and then upload to the CIM proposal as an additional file—do not complete the form in Google Drive or Sharepoint. The form provides useful information for reviewers at every level as they consider course proposals and the role the course may play in the WCU Gen Ed curriculum. As these forms are reviewer-facing, rather than student-facing, it is an opportunity to expand on how the course meets the INT requirement. Please do not just copy and paste information from the syllabus. Any proposals that do not include the Gen Ed Narrative Form will be rolled back to the preparer without review.

Note on Bibliographies: Preparers are no longer required to provide a separate bibliography—a list of major works in the field that informs the approaches and perspectives used in preparing the course—for CAPC reviewers. However, preparers are encouraged to provide this resource to reviewers at the department and dean stage of the submission process. These parties are best equipped to make informed judgments about whether a given proposed course draws adequately on current and

relevant scholarship in their discipline. It is expected that any reading list for students is included in the syllabus.

For preparers convenience, we list all INT goals and SLOs here:

- **Gen Ed Goal #1: Communicate effectively**
 - SLOs: *Address at least one of the following:*
 - a) Express oneself effectively in common college-level written forms
 - b) Revise and improve written and/or presentations
 - c) Express oneself effectively in presentations
 - d) Demonstrate comprehension of and ability to explain information and ideas accessed through reading
- **Gen Ed Goal #2: Think critically and analytically**
 - SLOs: *Address at least one of the following:*
 - a) Use relevant evidence gathered through accepted scholarly methods, and properly acknowledge sources of information, to support an idea
 - b) Construct and/or analyze arguments in terms of their premises, assumptions, contexts, conclusions, and anticipated counterarguments
 - c) Reach sound conclusions based on a logical analysis of evidence
 - d) Develop creative or innovative approaches to assignments or projects
- **Gen Ed Goal #4: Demonstrate the ability to think across and about disciplinary boundaries**
 - SLOs: *Address both of the following:*
 - a) Synthesize and/or integrate information, and/or approaches from multiple disciplines in the investigation of a concept, culture, or idea, or problem
 - b) Demonstrate the ability to appreciate how a given topic is informed and/or influenced by multiple disciplines simultaneously

Once you have submitted your CIM application, it will first be reviewed by your dean and department chair before proceeding through the CIM workflow until it reaches the Interdisciplinary Subcommittee. Once the proposal passes through the INT subcommittee, it will be forwarded to CAPC's General Education Committee, followed by the Undergraduate Programs Committee (UGPC), Executive Committee, and General Assembly. At any of these steps, the proposal may be either moved forward for consideration by other committees or rolled back for requested changes. Preparers should understand that rollbacks are not uncommon, nor are they a value-judgment of the quality of the course or the instructor. Also, please note that a committee may occasionally support a proposal but still ask the preparer to make minor changes before final approval. After Assembly support is obtained, the proposal will be forwarded to the Provost for final approval and inclusion in the catalog as an Interdisciplinary course. Although rare, proposals can be disapproved at the Provost stage. **No proposed course should be offered until final approval by the Provost and inclusion in the course catalog.**

COMMON PROBLEMS AND SOLUTIONS

- (1) The most common problem with first submissions is an overall lack of clarity and specificity, with respect to how the course fulfills the INT requirements (or more generally). The easiest solution here is to follow the checklist carefully and be explicit about how the course is meeting the requirements. For example, don't assume the reviewers (and students) will know how an assignment "requires students to integrate two or more of the disciplines covered in the course to engage the course subject," rather, be explicit in the assignment instructions to students and make these instructions available to reviewers.
- (2) The syllabus does not explicitly identify how the required readings, learning activities, and assignments are reflective of the interdisciplinary nature of the course, specifically:
 - a) Identify at least one time in the course schedule where it will be made explicit to students how interdisciplinarity enhances the study of the course subject.
 - b) Identify at least three times in the course schedule where the meaning of interdisciplinarity is markedly engaged and explicated.
 - c) Identify at least three occasions in the course schedule where at least two disciplinary subjects will be used to engage the course subject.
 - d) Identify at least one substantive assignment that requires students to integrate two or more of the disciplinary subjects covered in the course to engage the course subject.
- (3) The syllabus does not properly identify the appropriate Gen Ed Goals and student learning outcomes (SLOs) and/or does not link them **explicitly** with assessments. All syllabi must communicate the course-level Goals and Student Learning Outcomes (SLOs)---what the course is intended to accomplish. These must be clear, observable and measurable. In addition, INT *courses* must state relevant General Education goals (1, 2, 4; see [Gen Ed Program](#) or p. 7 of this handbook) and SLOs, and directly and **explicitly link the SLOs** to how they are assessed (associated assignments, exams, etc.). The link between SLOs and assessments (exams, papers, etc.) must be explicit. It should be clear to the committee how the linked assignments will assess the SLO—sometimes this is obvious, if not, briefly explain. For example, it is clear on the face of it how an essay exam would assess SLO 1a "Express oneself effectively in common college-level written forms", but it is not so clear how a multiple choice exam would do so. Be explicit.
- (4) Lack of clarity on which two or more disciplines throughout will guide the course inquiry. We realize that some disciplines themselves may be interdisciplinary by their nature, but at least two *unique* disciplines must be identified.

The Gen Ed Narrative Form should be used to provide additional information to reviewers about these points.

CONTRIBUTORS TO THIS HANDBOOK

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WORK CITED

DeZure, D. (2017 Mar 6) Interdisciplinary Pedagogies in Higher Education. In Robert Frodeman (ed.), *The Oxford Handbook of Interdisciplinarity*. 2nd edn. Oxford Handbooks (online edn). <https://doi.org/10.1093/oxfordhb/9780198733522.013.45>.

Frodeman, R. (2017 Mar 6) The Future of Interdisciplinarity: An Introduction to the 2nd Edition. in Robert Frodeman (ed.). *The Oxford Handbook of Interdisciplinarity*. 2nd edn. Oxford Handbooks (online edn). <https://doi.org/10.1093/oxfordhb/9780198733522.013.1>.

Klein, J. T. (2017 Mar 6) Typologies of Interdisciplinarity: The Boundary Work of Definition. in Robert Frodeman (ed.). *The Oxford Handbook of Interdisciplinarity*. 2nd edn. Oxford Handbooks (online edn). <https://doi.org/10.1093/oxfordhb/9780198733522.013.3>.

Moran, J. (2010) *Interdisciplinarity*. 2nd edition. Routledge.