DEFINING COURSE STRUCTURES

The term “interdisciplinary” is quite often misunderstood or is taken as some very large and very vague idea. Courses that are often thought of as interdisciplinary are sometimes multidisciplinary, cross-disciplinary or adisciplinary. Below is an effort to distinguish between these structures. I have borrowed Carolyn Haynes’ metaphor of ice cream, which, like these structures, is just basically good—but it comes in many varieties that produce very different results.

•MULTIDISCIPLINARY courses present disciplinary perspectives in a serial fashion, like Neapolitan ice cream. The flavors/discipline contents are lined up next to each other but don’t intersect. While this is an interesting approach, it leaves the responsibility of integrating the knowledge up to the students.

•CROSS-DISCIPLINARY courses are courses in which one disciplinary perspective dominates the other(s), like chocolate chip ice cream, where the dominant flavor is vanilla but with flavorful little chunks sprinkled throughout. While courses can be intentionally designed to be cross-disciplinary, cross-disciplinarity can also be an accidental result if the class is taught by one person, or if one discipline’s “way of knowing” is the focus with nuggets of a second (or third or fourth) discipline’s content scattered across the material.

•ADISCIPLINARY courses attempt to gain a holistic picture without specific attention to disciplines. A course like this generally starts with an idea and the approaches pop up where they may, like tutti-frutti. This is an interesting idea, but it can leave students (and faculty) feeling insecure and without direction. Because there is not a conscious effort to integrate types of knowledge, interdisciplinarity is generally missing.

•INTERDISCIPLINARY courses work toward conscious integration of insights from disciplines. The result is like marble ice cream, where both flavors/disciplines remain distinct and equal, but the result is a distinctly new flavor/experience. This handout addresses only interdisciplinary courses.

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1 Taken largely from material produced by the Association for Integrative Studies.
PUTTING TOGETHER A COURSE

- Identify pertinent disciplines and assemble a team.
  Try to ensure equal participation among members.

- Develop a topic; consider how to balance breadth and depth.
  Unlike discipline curricula that depend on individual classes providing discrete
  chunks of knowledge that a student uses to build on from one year to the next,
  interdisciplinary courses are worlds unto themselves. That is one reason why focus is
  so very important. Do not try to cover a huge topic; instead, focus on one part of the
  topic or one part of a problem. Some interdisciplinary courses have been built on a
  single statement. For instance, one course (syllabus available on the AIS website)
  used a statement, made in an article that was assigned as the first reading, that the
  problems present in the Middle East today are directly linked to the Crusades. That
  gave the class focus and two points of reference—the Crusades and a current,
  changing situation. The topics covered in the class include political science, religion,
  geography, mythology, literature, weaponry, etc. A course we could do here might be
  building a sustainable, “green” campus. Virtually all disciplines could be involved,
  and it could culminate in a proposal that would have lasting value.

- Let go of the “coverage” model.
  This is important and difficult to do. Unlike our disciplinary courses, where we
  generally have a certain body of knowledge to cover in a class, interdisciplinary
  courses take models, approaches, and ideas from more than one discipline to address
  a problem, issue or idea. The point is to go into uncharted territory, not to go deep
  into the heart of any one discipline. Give them as much as they need to do what they
  will do for the class and let the rest go.

- Consider what the course is really about (subtext).
  This is important for a couple of reasons. One is to ensure focus and clarity, and the
  other is to make sure you and your teaching teammate are really on the same page.

- Identify outcomes.
  There is a list of outcomes in this handout, but yours may be different, and they will
  no doubt be more specific. Knowing where you’re trying to go as a team is very
  important to the success of an interdisciplinary course.

THE SYLLABUS

- Go over the syllabus in detail the first day.
  It’s a good opportunity to inform students about the structure of the class. Many/most
  of our students are surprised by these classes; they come in year three, after fourteen
  or fifteen years of straight disciplinary classes. It is important they understand the
  aims of interdisciplinary classes for a number of reasons, including student
  evaluations at the course end.
• In the syllabus, explain how the course is interdisciplinary. It seems that most students actually expect a multidisciplinary or (more often) a cross-disciplinary class, in which they can still stay in the comfort zone of their own majors and just receive information about some other discipline. Tell them how the course is structured to integrate multiple disciplines. Do this orally and in detail on the syllabus. They’ll need to be reminded.

• In the syllabus, explain why the course is interdisciplinary. For interdisciplinary courses, it’s a good idea to make the outcomes section of the syllabus a major part of the document. Students tend to enjoy these classes, which is good of course, but they need to be able to articulate for themselves the reasons why the experience should be a significant part of a serious educational endeavor.

• Explain how the course will help students meet goals of the university and prepare them for professional and private life.

• Make course design, organization, disciplinary contributions, outcomes and assessment explicit.

ASSUMPTIONS AND TERMINOLOGY

• Be aware of implicit as well as explicit assumptions.
• Assess appropriateness of assumptions to context.
• Seek underlying similarities in differing terminology.
• Seek underlying differences in similar terminology.
• Determine if conflict (in concepts or assumptions) is
  • agreement obscured by a difference in terminology,
  • differences between alternatives, or a
  • clash between polar opposites.

LEARNING STRUCTURES:

The Association for Integrative Study has done studies on heuristics that work well in interdisciplinary classes. Here are a few of their suggestions. (This list isn’t meant to be definitive.)

Formal Cooperative Learning Structures
Group work is particularly effective in integrative classes.

• Student Team Achievement Division (STAD): A heterogeneous group works together to complete a teacher-designed assignment.
• Jigsaw: Each group member is given a specialized discipline area and must contribute to the teacher-designed ID assignment.
• Group Investigation: The teacher presents an ID problem; groups must come up with their own plan to address the problem using multiple disciplines.
Inquiry Based Learning
An orientation toward learning that is flexible and open and draws upon the varied skills and resources of the faculty and students, in which faculty are co-learners who guide and facilitate the student-driven, interdisciplinary learning experience.

Service Learning
Service Learning is a teaching and learning method that enables students to link theory with action through guided reflection. It connects students to members of a community where they provide meaningful service that responds to community needs as defined by the community. For a service learning experience to work, it should include:

• Ethical and meaningful collaboration with the community,
• Meaningful integration of service into the course,
• Ongoing reflection on the ethical, intercultural and interdisciplinary implications of the service experience,

Integrative Journals.
These work best if they are more than diaries. Evaluating journals can, however, be incredibly time consuming and not that productive for the faculty or students. A good suggestion is to have the students do journaling (in one of the professional styles) with responses to course driven prompts or problems, and then have the students evaluate each others’ work. They learn a great deal from both ends of that experience. (Articles on journal work in courses will soon be available from CIIS.)

AT THE COURSE END, STUDENTS SHOULD BE ADEPT AT:

• Identifying conflicts in insights;
• Resolving conflicts in insights;
• Evaluating assumptions and concepts in context;
• Creating common ground/vocabulary;
• Identifying linkages between different disciplines;
• Producing models/metaphors/themes;
• Constructing a new understanding of the problem;
• Testing understanding by attempting to solve the problem.
OUTCOMES

- Critical thinking
- Analytical thinking
- Writing with clarity and precision
- Research skills developed/improved
- Deepened understanding of the issue(s)
- Rethinking of ideas taken for granted
- Investigating various sides of an issue
- Effectively evaluating resources
- Recognizing ambiguity and biases
- Developing ethical sensitivity
- Synthesizing or integrating ideas
- Enlarging horizons or perspectives