

Design Toolkit for Learning Communities



LEARNING COMMUNITIES
DAWSON COLLEGE

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Design Process

- 1/12 Identify Objectives and Format
- 2/12 Draft a Project Abstract
- 3/12 Address Logistical Challenges
- 4/12 Reflect on Core Practices
- 5/12 Define Learning Outcomes
- 6/12 Design the Integrative Assignment
- 7/12 Create Integrative Learning Activities
- 8/12 Map Out Course Units and Schedules
- 9/12 Prepare Key Course Documents
- 10/12 Recruit Students
- 11/12 Teach
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Introduction

Learning Communities in Higher Education

Interdisciplinary teaching for integrative learning

Interdisciplinary teaching promotes greater student engagement in learning, enhances the development of higher cognitive skills, fosters more creative thinking, increases sensitivity to ethical issues, leads to greater tolerance for ambiguity... and creates innovative and holistic knowledge. Interdisciplinarity is the bridge between the academy and the real world.

- Wendy Hill, in "Interdisciplinary Perspectives and the Liberal Arts." In *Remaking College: Innovation and the Liberal Arts*, (2013).

Supportive peer and faculty communities

Students in learning communities spent more time actively involved in learning activities and more time interacting with students and faculty about educational matters than did similar students in the traditional classrooms of the college... What struck us was the fact that such involvements extended well beyond the classroom, so that students spent more time-on-task in learning activities, even after class. The social affiliations students formed in the shared learning environment of the classroom seemed to drive their engagement in learning within and beyond the classroom. Quite simply, they studied more, even after class, because they enjoyed studying together.

- Vincent Tinto, "Learning Communities: Building Gateways to Student Success," (1998).

The Dawson Context

Since 2016, the Learning Communities initiative at Dawson College has supported teams of faculty collaborating on the design and implementation of paired, clustered and stand-alone interdisciplinary team-taught courses. More than 60 teachers have contributed to the development of a unique course design process, leading to the creation of more than three dozen new courses in Dawson's Science and Social Science programs, and in General Education/Certificates. From the beginning a faculty-driven initiative, Learning Communities has assumed a central role in Dawson's efforts to enhance student engagement and learning in support of the multiple outcomes of our Graduate Profile.

This Design Toolkit introduces a Dawson approach to the design, implementation and evaluation of team-taught interdisciplinary courses. Our hope is that others will successfully adapt these strategies and tools to their own goals and their own settings.

Design Thinking for Learning Communities

Human-centred design thinking offers a rich set of strategies, tools and perspectives that can foster creativity and innovation in traditional curriculum and pedagogical development activities. In emphasizing student engagement and learning, learning communities offer a student-centered perspective that aligns with the human-centered nature of design thinking.

The design cycle of ideation, testing, and reflection underscores the reality that curriculum and pedagogical development is an iterative process. There is no final product. There are always opportunities for improvement. Feedback from students and co-teachers is never the same, a reality that spurs an ongoing process of evolution and adaptation.

Teachers are designers of learning experiences. Working collaboratively and maintaining a student-centred focus, faculty can discover new sources of compassion and creativity that contribute to the development of authentic and even transformative student learning. Equally, collaboration on curriculum development and the challenges of co-teaching see faculty embark together on pathways of professional development, with significant impacts on professional growth and personal satisfaction.

The Design Mindset

The attributes below have been adapted from the IDEO Field Guide to Human-Centered Design and Stanford University's D.School Bootcamp Bootleg.

How might you and your team activate some or all of these aptitudes as you collaborate on course design?



Empathy

Keep people and values in the foreground at all times. In decisions, optimize for compassion, authenticity and learning.

Optimism

“Yes! And...” is the way forward. Feed your team’s creative confidence.

Radical collaboration

Gather input from diverse sources and contributors. Listen before deciding. Be open to unexpected insights and new approaches.

Embrace experimentation

Explore and experiment with multiple possibilities. Diverge before converging. Turn off editor-in-chief, turn on mad-genius inventor.

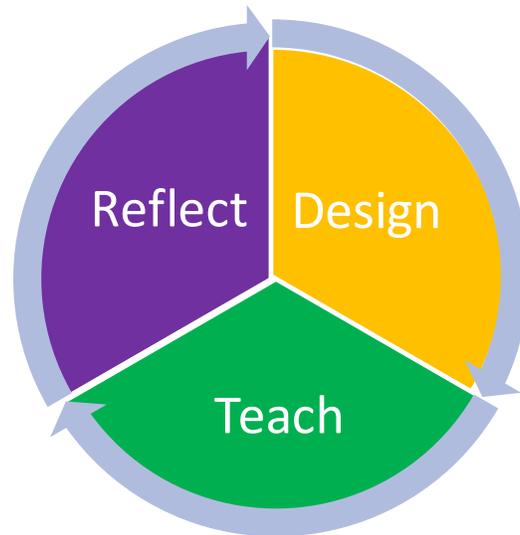
Learn by making and doing

Make rough & ready prototypes that you can test immediately. Perfection is not an option. Learn by failing. Refine by iteration.

Be mindful of process

Be agile, adaptable, open-minded. Zoom in on details, zoom out to big picture. Document a shared story of your collaboration that will inspire others.

The Design Cycle



Design

- Plan – Identify project objectives and format, draft a project abstract,
- Create – Create integrative assignment, key integrative learning activities, synchronized course units and schedules
- Prepare – Finalize unit and course schedules, select recruiting strategies

Teach

- Implement – Launch the courses, consult with co-teachers, document activities, track important feedback and adapt on the fly

Reflect

- Review and evaluate – Gather and share relevant student and teacher feedback, assess key assessments for evidence of integrative learning, decide what worked and what didn't
- Revise – Identify priorities, plan for changes, revise for next time in view of assessments and reflections

Workflow Organizer

You may find this four-phase workflow organizer helpful in setting objectives and giving focus to work sessions. The workflow is depicted in a linear fashion for clarity, but in reality, teacher-designers will likely jump back and forth between different steps as they progress. This Design Toolkit provides supporting concepts and activities for each numbered step of the process.

	DESIGN		TEACH	REFLECT
Plan	Create	Prepare	Teach	
<p>1/12 Define Objectives and Format</p> <p>2/12 Draft Project Abstract</p> <p>3/12 Address Logistics</p> <p>4/12 Consider Core Practices</p>	<p>5/12 Identify Learning Outcomes</p> <p>6/12 Design the Integrative Assignment</p> <p>7/12 Develop Integrative Learning Activities</p> <p>8/12 Map Out Course Units and Schedules</p>	<p>9/12 Recruit Students</p> <p>10/12 Prepare Key Course Documents</p>	<p>11/12 Teach & Adapt</p>	<p>12/12 Review & Revise</p>
Meeting dates:				

1/12

Identify Objectives and Format

What are the objectives of your project and what is the appropriate LC format for those objectives? With your partners, take a close look at [the possible formats for learning communities](#) and discuss which ones might be the right fit. You may not settle on a final choice until your design process is well underway.

Objectives

Formats

Close integration of two or more courses in complementary disciplines?	<ul style="list-style-type: none">• Paired or clustered courses (1,2)
Loose thematic connection between separate classes based on the development of integrative learning activities or projects?	<ul style="list-style-type: none">• Separate courses scheduled in a common time block (5)
Multiple teachers contributing to a single multi-disciplinary course?	<ul style="list-style-type: none">• Team-teaching in a standalone course (3)• Team-teaching in multiple sections of same course (4)
Links between classroom and experiential, co-curricular or para-academic learning?	<ul style="list-style-type: none">• Courses with integrated co-curricular or para-academic activities (6)
Team-teaching with a thematic focus or cases maintained across semesters?	<ul style="list-style-type: none">• Vertical integration across multiple semesters in a program (7)• Multi-semester case studies (8)

Work with your project collaborators to draft a concise statement of your LC project and its theme and objectives. Writing an abstract is a good way to embark on the design process with everyone on the same page. Alongside crystallizing the team's vision of the project, this working document is valuable in several other respects: It will serve later on as a course catalogue description; it may be the core of recruiting materials such as a course pitch, which is used by Advising counter and in recruiting messages. It will also serve the LC project as we publicize new projects in development.

- Make it concise – approximately 150–300 words.
- The rationale for the thematic focus of the courses and the linking of disciplines should be clear. This often involves a contemporary “wicked” problem (e.g. international climate negotiations; democracy in crisis), or an important interdisciplinary topic for an academic program (e.g. patient care planning in Nursing; project management in the Engineering Technologies; the intersection of Biology and Chemistry in Molecular Biology).

Examples

The abstracts below for several Dawson LCs began life as draft concept statements, and eventually evolved into course pitches and course descriptions.

- *Imaging Violence and Nonviolence* developed by Pat Romano (Humanities) and Kim Simard (Cinema and Communications)

Imaging Violence and Nonviolence combines a Humanities World Views course and a 365 Contemporary Issues course, allowing students to fulfill two General Education requirements while addressing an urgent contemporary issue: Why is violence so widely accepted in our world and how can we build effective resistance? In the Humanities course, students explore different manifestations of violence and the theory and practice of nonviolence, while in the Complementary course, students gain the tools to deconstruct the visual language that makes violence possible. The students end their integrative experience and bring theory and practice together by using such mediums as photography, video creation, or performance art, to create a work of artistic activism. Student work will be presented to the Dawson Community in a college-wide exhibit, and then archived as part of a permanent collection of student work in an

ongoing peace education project, called *Resist Violence*. Taking these paired courses counts toward both the Women's/Gender Studies and Peace Studies certificates.

- *Counting the Cost: Social Justice in Canada?* Ben Lander and Elizabeth Kirkland (History), pairing of Quantitative Methods and Canadian History

How is it that Dawson College sits on the unceded land of the Mohawk peoples and yet it was purchased by the Quebec government from an order of Catholic nuns? Why is it that immigrants aren't having their credentials recognized here in Canada so that men and women with medical degrees and PhDs are driving taxis or working in the service industry? What are the real risks concerning the TransMountain Oil Pipeline and will the protests make a difference? These are just some of the big social justice issues confronting us today that will serve as a launching point for *Counting the Cost: Social Justice in Canada?* This course pairing links two courses, Quantitative Methods (300-360-DW) and Canadian History (330-201 DW). We begin by looking at social problems that illustrate the current state of our society, and then dig back into the past to explore the roots of social justice issues through hands-on research. We will be going out into the community, watching documentaries, hearing from experts, and getting our hands dirty in the archives in order to build research projects that bridge classroom learning and social activism.

- *Making the Connections: Biology II & Organic Chemistry*, designed by Yoon-Seo Uh (Chemistry) and Janet Wyman (Biology)

Do you remember Lewis Structures, free energy and hydrogen-bonding from your General Chemistry class? Wouldn't it be great if these topics that you are already familiar with from your Chemistry course could be applied to learn functions of living organisms in your Biology course? In fact, Biology "speaks" Chemistry. The paired courses of *Making Connections*, Organic Chemistry and Biology II, will make this relationship clear to you: Organic Chemistry examines the alphabet of letters that make up the sentences in General Biology II. In Organic Chemistry, we study the molecules that mainly consist of carbon, hydrogen, nitrogen and oxygen atoms. These molecules, generally referred to as "Organic Molecules", are essential building blocks of macromolecules such as proteins, enzymes and DNA, which form the basic currency of life on Earth. In Biology II, we explore the biological processes that are rooted in the interweaving of numerous chemical reactions by organic molecules. An example of this is the notion of Chirality (or handedness), a unique property of organic molecules that are derived from the molecules' three-dimensional structural arrangements. Chirality serves as the principal mechanism in biological systems; for example, an enzyme and a substrate involved in cellular respiration system trigger the requisite physiological function, only when the enzyme molecule having the "right shape" is able to fit into the active site. In this paired course learning community, we aim to help you learn Chemistry and Biology as complementary subjects that together make a single unit, and how this unified knowledge can be applied to understand real-world problems such as climate change, food production and the development of new medicines.

3/12 Address Logistical Challenges

In the early stages of a new LC project, you and your collaborators will need to work towards clarity and agreement on a variety of logistical issues. As co-designers and co-teachers, you can establish a solid foundation for your relationship through discussing personal preferences and professional dispositions on the points below.

Take your team conversation into problem-solution mode. Use the list and chart below to select key issues and brainstorm solution options. Keep a live version of this document going throughout your design process, as you will likely revisit many issues on multiple occasions, with evolving perspectives on how to address them. Additional concerns will almost certainly arise as you move forward.

- Teaching philosophies
- Preferred pedagogies
- Classroom time management
- Attendance policies
- Assessment practices
- Feedback practices
- Teacher availability, contact info
- Teacher communication
- Student communication
- Online teaching platforms
- Standards for classroom and online behavior
- Online gradebook practices
- Course competencies
- Course outline format
- Relevant department policies
- Assignment submission policies, penalties if any
- Writing evaluation rubrics
- Participation evaluation
- Grading and commenting policies and practices
- Degree of integration of courses
- Integrative assignment design, timing, weight, evaluation
- Relationship to co-curricular initiatives, community resources
- Preferred remote platforms
- Target audience for LC theme
- Viability of LC re student population and progression grids
- Department approval process for new courses
- Teacher scheduling preferences (back-to-back, blocking for co-teaching)
- Room preferences
- Course descriptions for registrar catalogues
- Course pitch for recruiting
- Documenting and archiving course materials, exhibits of student work

4/12

Reflect on LC Core Practices

“When learning communities are created, the initial focus is on the type of curricular structure they will have. However, an equally important consideration is the learning environment that will be generated through that structure. Just putting students together in classes does not, in itself, stimulate learning or guarantee a positive experience of either learning or community. The challenge is to take creative advantage of the learning community structure to capture and intensify the synergistic possibilities for meaningful community building and learning.”

(Smith et al. *Learning Communities*, 97.)



Smith et al. suggest the five factors above must be considered in the conception and design of learning communities in order to realize the full potential of the “community” aspects of the learning environment. Let’s explore the potential of each factor.

Community: Purposefully foster interpersonal relations between students that support learning. Emphasize and humanize relations between students and faculty. Build in ongoing dialogue between co-teaching/team-teaching faculty. Look for opportunities to meaningfully connect the learning community with the larger campus community and outward to the civic community.

Diversity: In curriculum and instructional approaches, consider and design for the diversity of student population. Recognize diversity of the campus community and the civic community beyond. Highlight (versus hide) contrasting/conflicting cultural and political viewpoints.

Integration: In curriculum design, foreground integration of knowledge across disciplinary silos. Highlight inquiry-guided learning activities that integrate diverse viewpoints in the analysis of problems and the search for solutions. Integration can also be highlighted in purposeful metacognitive strategies, via reflection on bridging of knowledge and action, encouraging students to share prior experience, and collective sharing of new learning.

Active learning: Student engagement and interaction are key premises of effective learning. Complex, real world problems foregrounded as overarching course themes can motivate student engagement and interaction. Emphasis on group learning activities (versus lecture-based transfer of knowledge) stimulates student interaction and collaboration. Build adaptability and resilience by assigning varied learning roles to faculty and students.

Reflection and assessment: Balance formative feedback (as learning progresses) and summative feedback (when learning is over). Include opportunities for peer feedback to build student confidence. Base assessments and feedback strategies on transparent learning outcomes and evaluation criteria. Build in opportunities for reflection on learning for both students and faculty.

The guiding questions in the table below are designed to help faculty deepen their understanding of these five facets of LCs.

Arrange a meeting with your teaching partner to brainstorm some responses to the questions. Highlight answers that touch on current knowledge, skills and familiar resources that team members are confident drawing on and sharing – and take note of questions that identify areas where your team will need to develop new knowledge or strategies.

LC Core Practice Questions

Teacher Know-how & Resources?

<p>I. Community</p> <p>How will we build a community that is welcoming and supportive for all students?</p> <p>How will we create and sustain a community based on collaborative learning, fostering positive attitudes toward collaboration, and supporting collaborative practices?</p> <p>How could we use the surrounding campus and civic communities as a context for learning?</p> <p>How will we contribute to an ongoing community of practice of LC teachers?</p>	
<p>II. Diversity</p> <p>How will we create a classroom climate of respect for diversity?</p> <p>How will we ensure that curricular choices are informed by diversity and inclusiveness?</p> <p>How can we maximize our range of pedagogical approaches to address diverse learning styles?</p>	
<p>III. Integration</p> <p>How will we foster integrative learning by offering students the opportunity to inquire across disciplinary boundaries, to</p>	

<p>make connections, to synthesize & create new viewpoints?</p> <p>How can we create opportunities for students to make connections between their prior experiences and new knowledge, and make judgements leading to new forms of agency?</p> <p>How can we build in opportunities for reflection that develop metacognitive capacities?</p>	
<p>IV. Active Learning</p> <p>How will we set the stage for engaging learning by using messy, real-world problems and controversies as course themes & topics?</p> <p>How can we use active learning strategies that put students in the position of constructing knowledge about and responses to these problems?</p> <p>How can we underline the social relevance of learning by making some aspect of that learning public, in the way of artefacts, performances or events?</p> <p>How can we encourage teachers to take on multiple roles beyond that of professor: designer, coach, facilitator, co-researcher, co-author, co-learner collaborating with students?</p> <p>How can we support students in new and more demanding roles - contributor, facilitator, resource person, peer tutor, peer reviewer, group leader, teacher advisor, community contact person, etc.</p>	

<p>- roles that distribute responsibility for the quality of learning across the learning community?</p>	
<p>V. Reflection and Assessment</p> <p>How will we design assessments that are authentic measurements of the courses learning outcomes?</p> <p>How will we optimize learning by scaffolding informal assessments as learning stages into formal assessments?</p> <p>How can we integrate opportunities for formative reflection on the learning process, and give weight to these opportunities so that they have a significant value alongside summative assessments?</p> <p>How will we integrate feedback from student reflection into design and redesign of assessments?</p> <p>How we will sustain a reflective practice of our own as teachers? And take account of it as we review and plan for the future?</p>	

5/12

Create Learning Outcomes that are Interdisciplinary and Integrative

Learning outcomes are statements that identify the knowledge, skills and/or values that students should acquire by the end of an assignment, course, or program. For students, they clarify how this knowledge and these skills will be useful, and help them to assess their progress. For teachers, learning outcomes guide the design of assessments and evaluation tools.

** Upon completing this assignment, students will be able to create accurate diagrams of cells and be able to classify cells from microscopic images.*

** By the end of this introductory course, students will be able to explain the concepts of reliability and validity in quantitative and qualitative social research, and design instruments for data collection that are both reliable and valid.*

** By the end of this workshop, participants will be able to identify and classify their spending habits, and prepare and explain the value of a personal budget.*

Interdisciplinary and integrative learning outcomes

Learning community course design focuses on the acquisition and application of knowledge and skills, within *and between* disciplines. “Interdisciplinary” suggests a meaningful alignment of complementary *content* between courses in different disciplines. “Integrative” speaks to the ways that outcomes for student *learning* from separate courses map onto each other, and how learning activities and assessments in different classes can be connected to deepen learning as both courses proceed. If teachers design a clear set of separate (disciplinary) and common (interdisciplinary and integrative) learning outcomes, this should clarify and orient the work in both courses for students.

What makes a good learning outcome statement?

Good learning outcomes cover the acquisition, application and integration of knowledge. They specify how students will be able to employ knowledge, in the context of the class and more broadly where relevant.

- Uses active verbs and clear, specific language

- Is learner focused
- Is realistic vs aspirational: attainment should be within reach of all students
- Requires the application and integration of knowledge and skills
- Leads to specific assessments and measurable benchmarks for performance
- Identifies a timeline for achieving the outcome

Developing clear outcome statements is an iterative process. Over time, your original outcomes may need rethinking as you make changes to course content, structure and instructional approaches.

Strategies for creating effective learning outcomes

Creating an inventory of the knowledge, skills and values that the student will acquire over the course is a good starting point for writing effective outcomes.

Knowledge: Content students will master

** By the end of this unit, students will be able recall the 5 major events leading up to the Russian Revolution of 1917 and describe their role in initiating the Revolution.*

Skills: Capacities students will develop through learning activities and assessments

** By the end of this assignment, students will be able to distinguish between reliable and unreliable sources of scientific information.*

Values: Attitudes, dispositions, meta-cognitive skills contributing to intellectual development, well-being, citizenship, self-fulfilment

** Through the portfolio of reading responses, students will evaluate the evolution of their own attitudes and values in relation to Indigenous literature and societies.*

Alternately, Bloom's taxonomy (created 1956, revised 2001) can be useful for identifying the cognitive challenge of outcomes, and selecting appropriate action verbs for clear outcome statements.

Bloom's Taxonomy

<p>Create / synthesize: Combine knowledge to come to new conclusions, apply skills to situations or materials to develop new strategies or artifacts</p> <p><i>Design, assemble, build, compose, generate, invent, collect, construct, develop, formulate, organize, propose, fabricate</i></p> <p>Evaluate: Form a judgment on the value of information or the validity of arguments</p> <p><i>Appraise, argue, assess, defend, predict, select, support, determine, judge, argue, justify, convince, evaluate.</i></p> <p>Analyze: Support assertions using evidence and arguments; identifying causes and patterns</p> <p><i>Compare, contrast, criticize, distinguish, examine, question, test, interpret, classify, break down, categorize, analyze, diagram</i></p> <p>Apply: Apply knowledge in a new context</p> <p><i>Employ, illustrate, solve, use, relate, calculate, predict, apply, demonstrate, determine, model, perform</i></p> <p>Understand: Demonstrate comprehension</p> <p><i>Classify, describe, explain, locate, report, restate, summarize, paraphrase</i></p> <p>Remember: Recall information</p> <p><i>Define, identify, list, name, recall, repeat, state, outline, match, quote, label, recognize.</i></p>	<p>More complex, higher cognitive challenge</p>  <p>Less complex, lower cognitive challenge</p>
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Examples of interdisciplinary and integrative learning outcomes

I. Jane Wyman (Biology) and Yoon Seo-Uh (Chemistry) - paired Biology II & Organic Chemistry

These interdisciplinary outcome statements complement the existing ministerial objectives and science program intermediate learning objectives that already exist for the separate courses. The fourth outcome guided the development of the integrative lab activity two-thirds of the way through the term.

Students will be able to

- Recognize the common conceptual language shared between General Bio II and Organic Chemistry.
- Explain how the enantio-selectivity of odor sensation works (“lock and key” in chemistry and biology).
- Analyze structure and function relationships at different levels of organization in biological systems based on applying concepts of molecular level Organic chemistry.
- Evaluate two competing hypotheses regarding the chemical and biological nature of the sense of smell.

II. Carl Saucier-Bouffard (Humanities) – Humanities BXH Green Business Ethics

This course was developed in collaboration with Dawson’s Entrepreneurship co-curricular project. The third outcome was the basis for the culminating integrative project, a poster presentation that took place during E-Week in Conrods.

Students will be able to

- Understand and explain the main concepts of the two most influential theories in normative ethics (act utilitarianism and Kantian ethics);
- Identify and analyze several real-life challenges of respecting the requirements of these two ethical theories in the context of running a for-profit fashion business in Montreal;
- Predict challenges and design solutions to at least three of the ethical dilemmas that they would have to face if they choose to start a for-profit business located in Montreal in a market related to their field of study.

III. Lisa Steffen (History) and Susan Finch (Psychology) – paired Western Civilization and General Psychology

These teachers developed the following integrative learning outcomes for their paired-course History and Psychology learning community, organized around the thematic question “The Good Life?”

Students will be able to:

- Distinguish, practice and reflect on the different methodological approaches and perspectives of both history and psychology.
- Design and propose to a real-world audience a *social, psychological, economic, political* strategy to ensure that a) a particular psychological experiment/historical event is never repeated; or b) the results of a particular psychological experiment/historical event are sustained, furthered and protected.
- Convince a critical audience that the meaning of *The Good Life* is neither universal nor unchanging by way of an evidence-based letter

IV. Chris Roderick, Jean-François Brière, Andreea Michaela Panait – paired Physics Mechanics and Calculus I.

These Physics and Math teachers collaborated on the development of four groups of outcomes for a Mechanics–Calculus I paired course. The fourth outcome provided the basis for the integrative assessment.

Students will be able to

- Apply the discipline-specific notations for these concepts
- Identify common concepts of Calculus and Mechanics independent of notation
- Translate clearly and accurately from one notation system to the other.
- Illustrate concepts from Calculus with appropriate applications from Mechanics;
- Explain the link between physical quantities in Mechanics by applying exact methods and concepts from Calculus.
- Select and apply appropriate mathematical tools from Calculus to solve problems in Mechanics, and subsequently justify choices and reasoning.
- Analyze a real-world situation and formulate an argument that manifests the advantages of a transdisciplinary knowledge of the relationship between Calculus and Mechanics.

Collaborating to develop LC learning outcomes

Creating explicit learning outcomes with your colleagues will be an important first step in moving your course design from generalities towards the specifics of integration. Try the process below, documenting your progress as you advance. Refer to [the ABCD heuristic in this resource](#) if you feel you need more guidance.

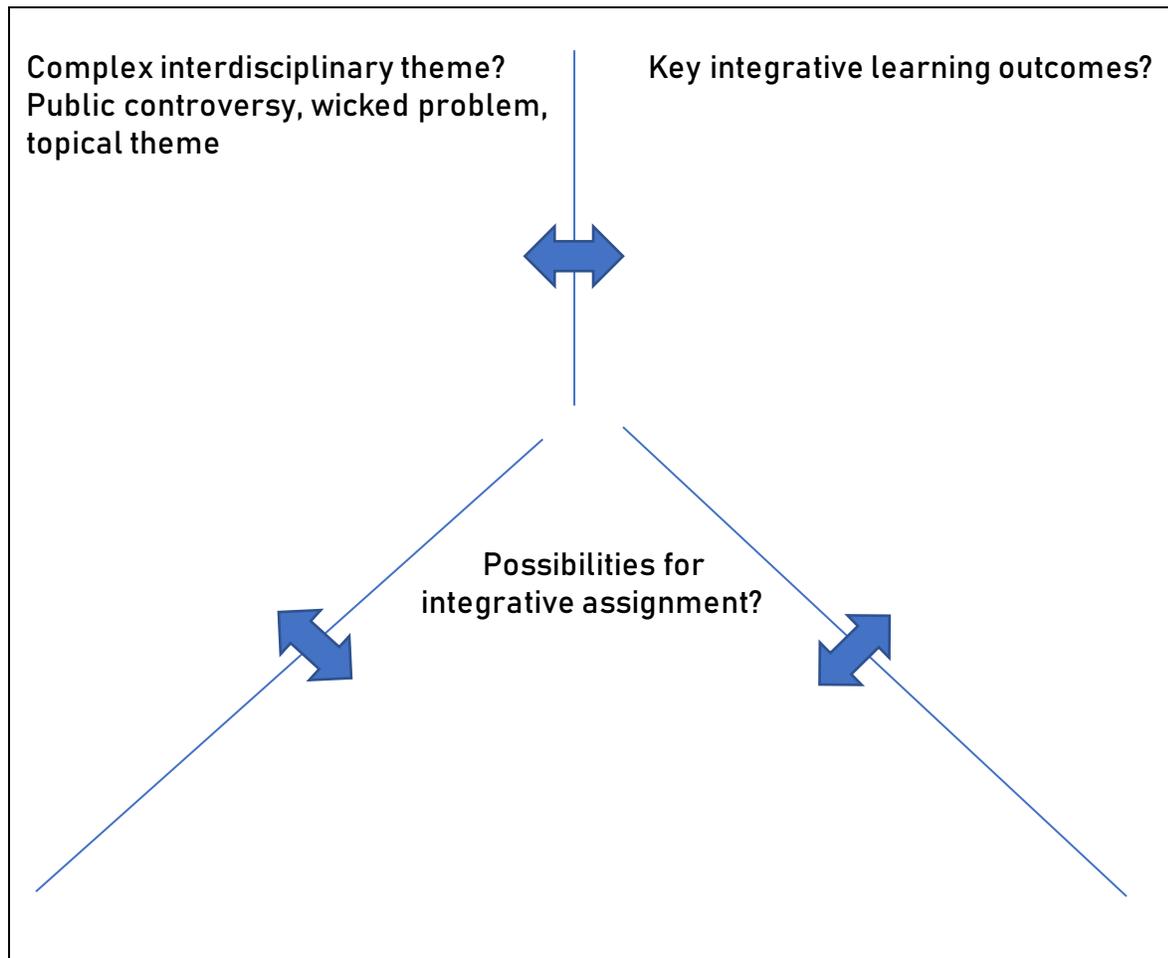
- Individually, after consulting existing competencies, draft a set of learning outcome statements for the separate courses.
- Then get together and review your outcomes, noting differences and commonalities.
- Develop a set of shared learning outcomes for the two courses, identifying where there is an emphasis on distinct disciplinary outcomes, and where there is an emphasis on integrative outcomes.

Use your learning outcomes to create your schedule of assessments (including the integrative assignment), learning activities and course units. Clear learning outcomes will give both students and teachers a sense of confidence that their courses are designed for meaningful learning.

6/12 Design the Integrative Assignment

According to Lardner & Malnarich (2010), learning community design often gels around the creation of the major integrative assignment. The work begins with the identification of a complex, interdisciplinary problem that will provide a thematic focus and generate student engagement. This theme provides the basis for a major integrative assignment that assesses the key integrative learning outcomes for the linked courses/disciplines.

Organize a brainstorming session with your teaching partner and develop your ideas using the schema below.



Then add depth with a discussion of these questions:

1. How can we backwards design learning activities so that they scaffold the acquisition of the disciplinary knowledge and skills of our integrative learning outcomes?
2. What curricular materials will be used by our students?
3. How might student work be situated in a real-world rhetorical context, with a specific audience and purpose? Using a genre appropriate to the context?
4. What are the anticipated qualities of beginning, developing and advanced interdisciplinary work? What evaluation rubrics and peer review activities will make these characteristics transparent to students?
5. How will opportunities for metacognitive reflection be built into the assignment process?
6. If possible and appropriate, how will student work be made public?

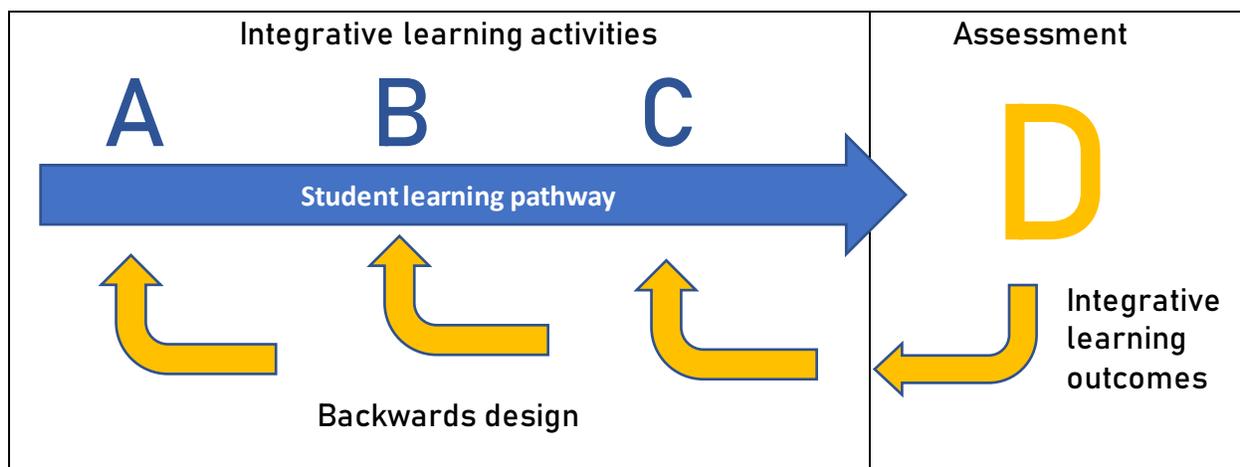
7/12

Create Integrative Learning Activities

An intentional approach to creating key learning activities is important in a co-teaching and/or team-teaching context. When courses are linked and integrated, students will benefit most where learning activities address knowledge and skills outcomes in a complementary or integrative manner. If there are redundancies, discrepancies or repetition across activities in two or more linked courses, students will notice.

When teachers collaborate on the design of key learning activities, points where knowledge and skills can be integrated across disciplines can emerge in the ideation process and then be highlighted in the refinement of the design of subsequent assessments. Generating several possible solutions allows teachers to select those activities that are most engaging and most promising in terms of integrative learning.

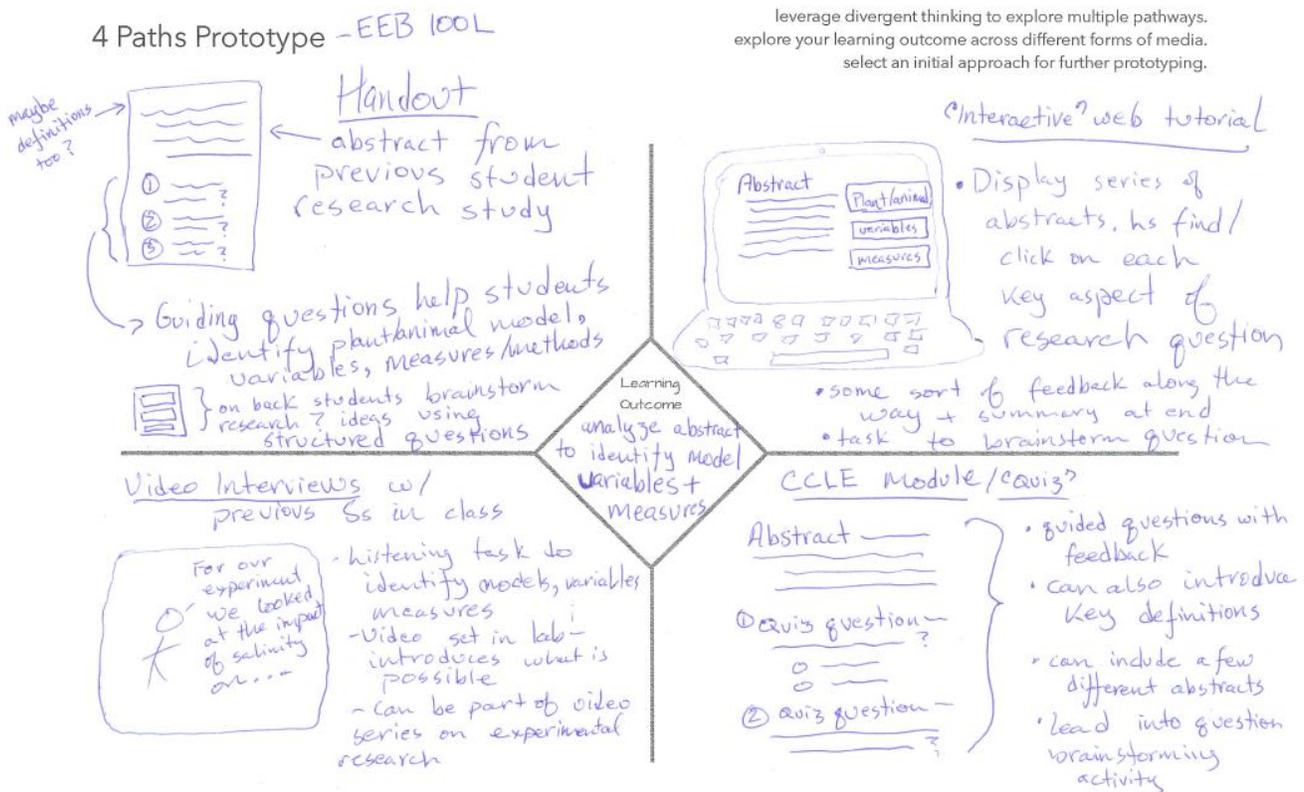
Start by revisiting your integrative learning outcomes. Agree on one or several as a focus for the development of one or several learning activities. How will the outcome be assessed? Once you have a form of assessment clearly defined, then start the process of backwards designing the learning activities that will ensure that students build the necessary knowledge and skills for the assessment.



An effective tool for brainstorming and evaluating possible learning activities is the 4 Pathways Heuristic, found in the UCLA Libraries *Build Something! Toolkit*.

1. Write your learning outcome in the center diamond. In the example below, the course is an interdisciplinary ecology course, Introduction to Ecology and Behavior. The learning outcome is "Analyze an abstract to identify model variables and measures."
2. Rapidly sketch four different approaches to helping students with this learning outcome. Give yourself about a minute to explore, sketch, and jot down notes for each option.
3. After 10 minutes of ideation, label your paths based on criteria you generate (e.g., most feasible, most impactful for learners, most fun to make, etc.

Explore a wide range of different options freely and creatively as you identify your 4 pathways. Consider print, digital, video, audio, performance art, animation, in-person activities, in-class or outdoors – anything goes! Then select one to develop a prototype.



CC BY 4.0, Brecher Cook, D., & Worsham, D. (2018, April). *Let's Build Something! A Rapid-Prototyping Instructional Design Workshop*. Pre-conference workshop at the 2018 CARL Conference, Redwood City, CA, adapted from: Gray, D., Brown, S., & Macanuff, J. (2010). *Gamestorming: a playbook for innovators, rulebreakers, and changemakers*.

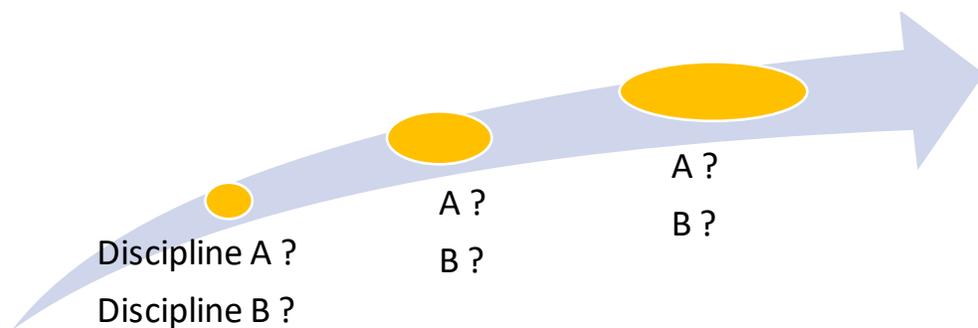
8/12

Map Out Course Schedules

The arrangement of units in a course schedule is among the final steps of course design. How do different topics and assessments best fit together? Keeping the student learning experience in the foreground is key to a coherent flow of content and learning activities. Designing with the learner in mind involves stepping into the students' shoes: What is their prior knowledge? What are their expectations? What challenges will they face over the semester, inside and outside of the classroom?

The collaborative design of linked courses introduces the additional challenge of coordinating unit sequences across courses. Will students readily grasp the relationship between what is happening in one class and what is happening in the other? Good collaborative design decisions at the level of unit sequencing will increase the likelihood that students will grasp and benefit from interdisciplinary connections. The level of coordination required will depend on what teachers agree is the desired degree of integration between courses. But regardless of whether linked courses and their units are tightly or loosely integrated, a coherent student learning experience is still the desired outcome.

In advance of finalizing unit sequences and class schedules, consider carefully the narrative arc of the learning community as a whole. Return to the central theme or problem at the heart of your collaboration. What is the storyline and how will you help students to follow it? What are the key learning moments? What is contributed by disciplines A and B at these key moments?



Mapping out the broad narrative arc of the LC can lead to new insights and important revisions in the ordering of course units.

Once the connections between integrative assignment, key learning activities and course units are well established, co-teachers can start to assemble a synchronized schedule of units and classes. The synched schedule will provide a roadmap of student learning across both courses for the entire semester.

Where possible, teachers should consider moderating their expectations of the content they intend to cover in class. A reality of co-teaching for integration is that it has to be done intentionally to be effective – and this takes time. This means that teachers may have to be creative in developing strategies to flip content out of the classroom.

Additionally, if paired courses are scheduled back-to-back to create a large block of time that permits activities outside the classroom or off campus, teachers have to be prepared to make different decisions about how they will address content and outcomes that they usually would cover in class. The optimal scenario is that out-of-classroom experiential activities are designed around key learning outcomes.

In addition to allowing the complementary alignment of content and learning activities, synchronized schedules allow co-teachers to plan staggered assessments so that students aren't overwhelmed by multiple tests, labs or assignments in the same week.

In all cases, the demands of covering required content *and* creating opportunities for integrative learning will require both precise scheduling ahead of time and a willingness to adapt and make changes once the semester starts. It can be a good idea to inform students that the schedule will be subject to change as you proceed. The serendipity of co-teaching means that you may end up taking a left turn where you had planned a right, with the goal of responding to unexpected opportunities – an invited speaker or an off-campus event – and the particular interests of the class. In fact, these kinds of adaptations often produce some of the high points of the semester for both students and teachers.

As you work on synchronizing units and schedules, take a look back at your list of logistical challenges. Are there any outstanding issues that might impact how each course proceeds? Address these before committing to a finalized schedule.

Take a look at the examples of synchronized schedules below, and discuss with your teaching colleague how some of their features might be inform the development of your own schedules.

Examples of Synchronized Paired-Course Schedules

I. General Biology II and Organic Chemistry I

PAIRED LECTURE SCHEDULE

Week of	week	101-BZE-05 General Biology II		202-BZF-05 Organic Chemistry I	
		TOPICS		TOPICS	
		Monday Lecture	Wednesday Lecture	Monday Lecture	Wednesday Lecture
August 31 st	1	Course Outline Introduction	Introductory Case Study	Introduction Bonding and Structure	Acid – Base Chemistry
September 7 th (Monday holiday and Tuesday is a Wednesday)	2	Holiday	Properties of water and Intro to Homeostasis	Holiday	Introduction to Alkanes Solubility Properties
September 14 th	3	Homeostasis and Selected Organ System	Structure of Membranes	Chirality	Chirality
September 21 st	4	Evaporative cooling case study	Membrane Transport	Chirality	Alkane conformers
September 28 th	5	Quiz 1 /Membrane transport 2-Cell signaling	Cell signaling	Alkane conformers Introduction to Alkenes	Class Test #1
October 5 th	6	Membrane transport osmosis case study Intro to metabolism	Class Test #1	Introduction to Alkenes	Reactions of Alkenes
October 12 th (Ped Week)		No classes-Ped Week			
October 19 th	7	Action potential- structure of neuron	Enzymes	Reactions of Alkenes	Reactions of Alkenes
October 26 th	8(lab test 1 BIO)	Cellular respiration	Cellular respiration	Reactions of Alkynes	Reactions of Alkynes Delocalized Electrons
November 2 nd	9	Integrative Assessment Case Study	Cellular Respiration	Delocalized Electrons	Class Test #2
November 9 th	10	Cellular respiration case study	Photosynthesis I	Delocalized Electrons Alkyl Halides – S _N vs E	Alkyl Halides – S _N vs E
November 16 th	11	Quiz 2 /Photosynthesis I	Photosynthesis III	Alkyl Halides – S _N vs E	Alkyl Halides – S _N vs E
November 23 th	12	Photosynthesis case study	Class Test #2	Alkyl Halides – S _N 1 vs E Alcohols - Elimination	Radicals
November 30 th	13	DNA history	DNA replication and mutations	Radicals	Class Test #3
December 7 th	14(lab test 2 BIO)	Eukaryotic Gene Expression transcription	Eukaryotic Gene Expression translation	Electrophilic Aromatic Substitution	Electrophilic Aromatic Substitution
December 14 th		Control of gene expression DNA Case study (PCR or Crispr)	N/A	Electrophilic Aromatic Substitution	

II. Calculus I and Physics Mechanics

	2018 Fall	<i>Calculus</i>	Math	Physics	<i>Mechanics</i>		
Test week	Class#	Date	(First Draft)				
	1	Aug23	Course outline, Review of Algebra Modules (I+II)			intro	
	2	Aug27	Algebra Modules(III), section 1.1 Functions and Their Representation			Lab1: Force Table	
	3	Aug28	Section 1.2 A Catalog of Essential Functions			Forces: What & FBD	
	4	Aug30	Section 1.3 The Limit of a Function.			Forces: N1L	
	5	Sept04	Section 1.4 Calculating Limits.(1/2)			Torque: What	
	6	Sept05	Section 1.4 Calculating Limits.(1/2)			Lab2: Torque Boom balance	
	7	Sept06	Section 1.5 Continuity (1/2)			Equilibrium: Forces & Torques	
	8	Sept10	Section 1.5 Continuity (1/2)			Lab3: Measurement (chips)	
	9	Sept11	Section 2.1 Derivatives and Rates of Change (1/2)			Rosetta Stone : give	Motion Diagrams
	10	Sept13	Section 2.1 Derivatives and Rates of Change(1/2) Section 2.2 The Derivative as a Function(1/2)				Graphs of Motion
Math	11	Sept17	Section 2.3 Basic Differentiation Formulas				Lab4: Motion Detector & Graphs
Math	12	Sept18	Section 2.4 The Product and Quotient Rules			Kinematics document	Rosetta Stone : receive & discuss
Math	13	Sept20	Review for Test I				1D Kin w Cal! 1D Kin w Cal! Two-stage problems (tracker? Provided data)
Phys	14	Sept24	Test I				
Phys	15	Sept25	Section 2.5 The Chain Rule (1/2)				2D Kin intro
Phys	16	Sept27	Section 2.5 The Chain Rule (1/2)				Test1: Equilibrium & Kin1D
Math	17	Oct02	Section 2.6 Implicit Differentiation			Plane Landing	Plane Landing
Math	18	Oct04	Section 2.7 Related Rates (1/2)				Wheel (& Piston)
Phys	19	Oct09	Section 2.7 Related Rates (1/2)			Wheel & Piston	2D Kin angular
Phys	20	Oct11	Section 2.8 Linear Approximations and Differentials			Uncertainty estimation	Uncertainty estimation lab
Math	21	Oct15	Section 3.1 Exponential Functions Section 3.2 Inverse Functions and Logarithms				angle, hanging springs, Spring
Math	22	Oct16	Section 3.3 Derivatives of Logarithmic and Exponential Functions(1/2)				Friction Activity (w area)
Math	23	Oct18	Section 3.3 Derivatives of Logarithmic and Exponential Functions(1/2)				N2L
Phys	24	Oct22	Section 3.5 Inverse Trigonometric Functions				Cart & Hanger
Phys	25	Oct23	Section 1.6. Limits Involving Infinity				2body
Phys	26	Oct25	Review for Test II				2body
Math	27	Oct29	Test II				2body & Make a Problem?
Math	28	Oct30	Section 3.7 Indeterminate Forms and l'Hospital's Rule(1/2)				Circ Dynamics
Math	29	Nov01	Section 3.7 Indeterminate Forms and l'Hospital's Rule(1/2)				Circ Dynamics
Phys	30	Nov05	Section 4.1 Maximum and Minimum Values				Energy : work
Phys	31	Nov06	Section 4.2 The Mean Value Theorem				Energy : work
Phys	32	Nov08	Section 4.3 Derivatives and Shapes of Graphs (1/2)				Test 2

Math	33	Nov12	Section 4.3 Derivatives and Shapes of Graphs (1/2)			Energy : Conservation
Math	34	Nov13	Section 4.4 Curve Sketching(1/2)			Conservation, potential
Math	35	Nov15	Section 4.4 Curve Sketching(1/2)	Two-minimum molecule	Two-minimum molecule	Conservation, graphs
Phys	36	Nov19	Section 4.5 Optimization Problems (1/2)	angle, hanging springs, Spring		Collision Lab
Phys	37	Nov20	Section 4.5 Optimization Problems (1/2)			impulse
Phys	38	Nov22	Review for Test III		Rocket ?	Momentum
Math	39	Nov26	Test III		Uncertainty estimation	Ballistic Pendulum
Math	40	Nov27	Section 4.7 Antiderivatives			Torque Dyn
Math	41	Nov29	Section 5.5 The Substitution Rule			Torque Dyn
Phys	42	Dec03	Differential Equations	Drag project (analytic)	Drag project (experimental)	?Torque? & Drag
Phys	43	Dec04	Differential Equations Final Review	Rocket ?		prob session
Phys	44	Dec06	Final Review			Test 3
	45	Dec10	Final Review		submit Drag project	Angular Momentum & Drag

III. Research Methods and Introduction to Geography

		Geoff (Geography)	Rdgs/Assigns	Mark (RM)	Rdgs/Assigns
1 T	Jan. 22	Introductions		Introductions The Peculiarities of Oral History	
2 H	Jan. 24	What is Geography? Space, place, and toponyms	Matthews et al. <i>Geography: The World is our Stage</i>	Group Work: Interview Techniques	Abrams, Lynn.
3 T	Jan. 29	Walking Tour I: Neighbourhood Orientation	Solnit, R. <i>Tracing a Headland</i>	Walking Tour I: Neighbourhood Orientation	
4 H	Jan. 31	Reading maps	Journal 1	Research Ethics	
5 T	Feb. 5	Reading maps		Life History Interviews	<i>OHA Principles and Best Practices</i>
6 H	Feb. 7	Walking Tour II: Mapping SV		Walking Tour II: Mapping SV	
7 T	Feb. 12	Territory, borders, and globalization	Journal 2	Exploring the Archive	
8 H	Feb. 14	Territory: segregation and neighbourhoods	Diener, A. <i>A Very Bordered World</i>	Test I: Oral History and Ethics	Test I (15%)
9 T	Feb. 19	Demography	Map-reading assignment (10%)	Intersubjectivity	
10 H	Feb. 21	Walking tour III: Borders; proposal instructions	Journal 3	Walking Tour III: Borders	
11 T	Feb. 26	Migration and push-pull factors	Slide set distributed on Lea	Archive Lab 1: LH Submission	Life History Interview (15%)
12 H	Feb. 28	Walking Tour IV: Food Cultures	Journal 4	Walking Tour IV: Food Cultures	
13 T	Mar. 5	Test I	Test 1 (15%)	Shaughnessy Village Interviews	
14 H	Mar. 7	Urban environmental issues		Secondary Source Research: Library & Online	

15 T	Mar. 12	Urban environmental issues	Project proposal due (15%)	Truth vs. Facts: <i>Fact of the Matter</i>	
16 H	Mar. 14	Walking Tour V: Field Work		Walking Tour V: Field Work	Test II (20%)
17 T	Mar. 26	Walking Tour VI: Sainte-Catherine		Walking Tour VI: Sainte-Catherine	
18 H	Mar. 28	Cities and Culture	Journal 5 Claval, P. <i>The Nature of Cities</i>	Collective/Individual Memory: <i>Remembering Stonewall</i>	
19 T	Apr. 2	Public space, gentrification, and 'right to the city'	Reading TBA	Archive Lab 2: SV Donation	Shaughnessy Village Interview (15%)
20 H	Apr. 4	North American vs. historic cities; car-free cities		Workshop 1: DOHP Archival Research	
21 T	Apr. 9	Industrial decline and the post-industrial cities	Primary Source Photo Journal (10%) Widner, R. <i>Physical Renewal of the Industrial City</i>	Workshop 2: Transcriptions	
22 H	Apr. 11	Walking Tour VII: Saint-Henri	Journal 6	Walking Tour VII: Saint-Henri	
23 T	Apr. 16	Walking Tour VIII: Lachine Canal (or Pointe Saint-Charles)	Journal 7	Walking Tour VIII: Lachine Canal (or Pointe Saint Charles)	
24 H	Apr. 18	Test review		Project Lab	
25 T	Apr. 23	Test II	Test II (10%)	Project Lab	
26 H	Apr. 25	Final project overview		Peer Review Session	Research Project – First Draft (10%)
27 T	Apr. 30	Walking Tour IX: Mountain Walk		Walking Tour IX: Mountain Walk	
28 H	May 2	TBD		Test III: Reflections	Test III (5%)
29 T	May 7	Walking Tour X: Presentations	Journal 8	Walking Tour X: Presentations	
30 H	May 9	Walking Tour XI: Presentations	Final Project (20%)	Walking Tour XI: Presentations	Research Project – Final Draft (10%)

IV. Humanities Worldviews and Cinema Complementary Imaging Violence and Nonviolence

Weeks/Classes	Humanities	Integrative Activities	Cinema-Communications
1. TOWARDS UNDERSTANDING <ul style="list-style-type: none"> Introduction to Key Concepts (Humanities) and Visual Language and Technical Skills (Cin-Com) 	Introduction to course outline	→←The joint activity done in the first Cin/Com class encourages the students to reflect on their ideas of what constitutes violence and nonviolence (examples of direct, cultural and structural violence are presented)	Violence/Non-violence Activity
	Reflection: quotes		

2.	Lecture/Discussion: Defining violence	<p>← Students in Cin/Com work on images that resist violence (one example Lee Miller's Hitler's Bathtub)</p> <p>→← When teaching the course in person, Kim introduces a semester long assignment where students put together a journal on the violence they see during the semester; as the term goes on, more Humanities content creeps into their reflections</p>	Intro to semiotics/communication strategies
	Lecture/Discussion: How violent is our world?		
3.	Lecture/Discussion: Defining power, resistance and nonviolence	→← Theoretical ideas linking to Practice	Intro to the study of art and resistance. MUST: Performance art, Mash-ups, contemporary monuments.
	Classroom discussion on key chapters from Anthropologist Carolyn Nordstrom's <i>Shadows of War</i>		
4.	Essay writing period; Nordstrom essay due	← Students learn ways to re appropriate images; work on examples of cultural violence	Meaning making workshop (assignment attached) – MEMES and options for making work.
• Violence and Human Nature (H) and Media technology and analysis (C/C)	Introduction to Hobbes' World		
5.	Challenging Hobbes's pessimism (using texts from biology and anthropology)		How to read images, write using visual /cinematic language (last week's assignment due)
	Begin discussion of the emotional roots of violence		
6.	Lecture: Examining the Root Causes		Scene breakdown/class analysis workshop
	Discussion: "Globalization and Extremism"		

7.	Reading quiz on Sociological article by Kimmel and Kalish (due at end of class period)	← Students analyze scenes from the film <i>Selma</i> → ← Joint presentation of upcoming midterm	Follow-up on workshop with extensive feedback
	Finding connections: from an anthropological examination of life in a war zone, a psychological analysis of inmates in US prisons, a sociological look at school shootings, and a feminist critique of military culture;	→ ← Preparation for midterm exam; both teachers typically participate (some of the insights from the texts are suggested through the film <i>Polytechnique's</i> themes and visual imagery)	
8.	Screening <i>Polytechnique</i> (using watch2gether)	→ ← Major Integrative Assignment; joint screening and post-film analysis	Post- Film Discussion
	Midterm take-home essay due before class; Screening <i>Fambul Tok</i>	→ Envisioning new human possibilities; inspiration to support a commitment to everyday resistance	
9. TOWARDS RESISTANCE • Peace through Strength? (H)/Resist Violence Project Development (C/C)	Reflection on Thucydides, "The Melian Dialogue"	→ Courses content separates more as Humanities delves into how ideas that justify violence and war are created, while students focus on their projects; but the Humanities content is reinforcing the need for cultural forms of resistance to make what is unseen seen.	Proposal writing workshop/Thematic virtual exhibit brainstorm
	Discussion: Andrew's Bacevitch's reading "The Normalization of War"		
10.	Reflection on Obama's Nobel Speech		Approval of project ideas, proposals due. Individual/team meetings
	Lecture: Peace through Strength		
11. • Manufacturing Consent (H)/Project Creation (C/C)	Lecture (continued)	→ Analysis of "In Flanders Fields" and "Dulce et Decorum Est"	Further project development/assigned committees
	Lecture: Manufacturing Consent 1	→ Short reading response assignment: reflections on the 1930s publication of photos in Canada that resist the romanticization of WW1	

12.	Lecture: Manufacturing Consent 2	→ Reading response due on Bourke's chapter "Playing War"; interesting argument that many anti-war films still legitimize war	Project rough stages presentations, promotional strategies and materials finalized, web considerations for exhibit solidified
	Lecture: War as Spectacle	→ Voyeurism vs. Witnessing: Reflecting on excerpt from <i>Dear Sama</i>	
13.	Response on Leonard and Vasquez due	→ Response due on 2 articles – one views war video games as a form of propaganda; the other looks at how new visual technologies affects both civilians and soldiers' views of the battlefield	Promotional material for exhibit disseminated
REVEALING RESISTANCE • Potential of nonviolence (H)/ Going public (C/C)	Lecture: The foundations of nonviolence theory	→ Analysis of a Civil Rights sit-in; Nonviolent action as performance art	
14.	Lecture/Discussion: The transformative potential of nonviolence:	→ Exploring how nonviolence is both disruptive and constructive, reinforcing significance of artistic activism	Final projects polished, work out technical details.
	Lecture: Practical nonviolence		
15.	Lecture: Is nonviolence a realistic alternative; examining the evidence	→ ← The value of nonviolence resistance is reinforced	Exhibit launched/self-evaluation completed in class.
	Final Essay Writing Period		

9/12

Finalize Key Course Documents

Arriving at a final version of your synchronized course schedules is a milestone at the end of the LC design process.

In some contexts, common course outlines may also be a desirable feature of paired or clustered courses. A single outline laying out the requirements and expectations for 2 or 3 courses can be a powerful statement to students of the integrated experience that the semester holds for them.

- For examples of common course outlines, review [this outline created by Pat Romano \(Humanities\) and Kim Simard \(Cinema and Communications\) for their pairing “Imaging Violence and Non-violence”](#),
- Or another by [Julian Nemeth \(Humanities\) and Kris Woofter \(English\) created for a recent Reflections seminar “Schools of Suspicion in Philosophy and Literature.”](#)

In other contexts, a common outline may be impractical. Outlines might be heavy on administrative details, or requirements and workload descriptions for individual courses may already be lengthy. If outlines are separate, it is important that they highlight a clear rationale of the relationship between the linked courses, along with a coherent and consistent explanation of the expectations of the co-teachers with respect to how the courses will be administered.

In cases where common outlines are not feasible, teachers may choose to distribute separate outlines along with a common statement of the integrative learning outcomes that accompanies the synchronized schedule of classes.

- Co-teachers of the Calculus I & Mechanics pairing distribute [this explanation of the integrative learning outcomes](#) along with their common schedule of classes and their separate course outlines.

Review these examples with your design team and consider which approach makes sense for your LC.

It would be disappointing if you designed an amazing interdisciplinary LC and no one signed up for it!

Depending on program requirements and practices, new and returning students will enroll in LC courses via three specific pathways:

- Direct allocation by the Registrar
- Recruitment for pre-registration
- Online registration

Where program policies require enrollment in LC courses, allocation by the Registrar will typically fill sections with the appropriate students in appropriate numbers.

Where programs allow students to choose courses and create their own schedules, LC coordinators and teachers work with multiple partners in advance of the registration period to reach their target student audience and enroll sufficient numbers. Deans, program coordinators, academic advisors, communications professionals and administrative technicians may all play a role in a coordinated recruitment effort. Most students will have never taken a LC, and may have no clear sense of what they are or why they should take them. Successful recruitment is thus focused on informing targeted students of the LC options available to them and what the benefits are of enrolling.

Several strategies are used successfully at Dawson to recruit students. LC leads and LC administrative support staff can help teachers decide which strategies suit their needs.

- Omnivox student portal: A notice in the News section advertising upcoming registration or pre-registration will be seen by all students.
- MIO mailings: A mailing list that identifies sub-sets of target students using different variables - program, certificate, course pre-requisites, etc. - can be generated by IST. These students will receive a tailored MIO message explaining your courses and how to register.
- Classroom visits: When LC courses have pre-requisites, teachers can briefly visit these pre-requisite courses before registration for the subsequent semester begins to generate interest and sign students up for pre-registration.

- **Course pitches and postcards:** A visually attractive one-pager or postcard introducing your LC and explaining how to register can be used in mailings, or distributed by Advising, or handed around in classroom visits to prospective students.
- **Video trailers:** Slides for campus video monitors will display promotional images and information drawn from course pitches.

Examples: One-page Course Pitches

Are you a Social Science student who needs a **QM for Fall 2018**?

Would you like to complete your QM course requirement along with a Social Science option course at the same time? Consider enrolling in a **QM + Canadian History** learning community called [*Counting the Cost: Social Justice in Canada?*](#)



- How is it that Dawson College sits on the unceded land of the Mohawk peoples and yet it was purchased by the Quebec government from an order of Catholic nuns?
- Why is it that immigrants aren't having their credentials recognized here in Canada so that men and women with medical degrees and PhDs are driving taxis or working in the service industry?
- What are the real risks concerning the B.C. Oil Pipeline and will the protests make a difference?

These are just some of the big social justice issues confronting us today and will serve as a launching point for *Counting the Cost: Social Justice in Canada?*

What will we be doing in this course?

This course pairing of Quantitative Methods (300- 360-DW) and Canadian History (330-201 DW) begins by looking at the current state of our society and then digs back into the past to explore the roots of these social justice issues through hands-on research. We will be going out into the community, watching documentaries, hearing from experts, and getting our hands dirty in the archives in order to build research projects that bridge classroom learning and social activism.

What's a paired course, you ask?

A paired course involves the completion of two separate courses around a single theme. The teachers of those two courses will work closely together to integrate their course activities so that the work done in one class will help you to complete the work for the other. You can preregister for these courses by getting in touch with Karina D'Ermo kdermo@dawsoncollege.qc.ca

Questions? Please see Ben Lander (Quantitative Methods) or Elizabeth Kirkland (Canadian History), by MIO or in person in 8B.7.

Do you need these courses for Fall 2018?

- * Phys Ed 103
- * English 103

Register for **Nature Revisited**, a Learning Community that combines one intensive + one regular day course in a creative, interdisciplinary approach to learning:

- * Phys Ed 109-103 (Intensive): Outdoor Explorations
- +
- * English 603-103 Literary Themes: Into the Wild: Writing about Wilderness and Ecology



Nature Revisited: Two required General Education courses, one challenge: A healthier and deeper relationship with the natural world

- * What skills and attitudes can I develop to feel at home in the outdoors, enjoy activities like canoeing and hiking, and reduce my environmental impact? What meditative and creative practices can I use to help reduce stress and to appreciate & value my surroundings?
- * What can I learn about my place in the world from stories, poems and essays about wilderness experience and ecology? How can I develop my creative and critical abilities in both art and writing in response to natural and urban landscapes?

What is a learning community? Two courses led by two teachers for one group of students. In Nature Revisited, you'll pose challenging questions, make connections between disciplines, collaborate on projects with peers and profs, and enjoy two awesome outdoor trips in September and October. For information, MIO Doug Smyth (Phys Ed 3G.1-3) or Ian MacKenzie (English 4D.5).

Only 25 spaces available! To register or find out if you are eligible for this Learning Community, MIO Karina D'Ermo or send an email to kdermo@dawsoncollege.qc.ca



Launching the first prototype of a learning community pairing, cluster or team-taught stand-alone is an exciting time! A lot of energy has been invested in course design, and the teaching team has high hopes for a successful start. Here are some questions to consider at the beginning, middle and end of the semester to sustain a reflective teaching practice.

As the semester gets underway...

<p>How might our team include students in thinking about the LC as an ongoing experiment in collaborative learning?</p>	<p>Testing a prototype is based on sharing observations of what works and what doesn't; the feedback is carried forward in refinements to future iterations. Think about creating a dialogue with students on this level from the beginning, such that they assume the role of co-designers.</p>
<p>What is the best way to introduce and reiterate clearly the overarching theme and goals of our LC?</p>	<p>Recalling that most students have no experience with interdisciplinary pairs or clusters, consider introducing the key guiding questions for the semester as a narrative, and model for students how to refer to that narrative as they learn to make their own transdisciplinary connections.</p>
<p>How will we emphasize the "community" dimension of our LC early on, and not lose touch with it later?</p>	<p>Social activities - icebreakers, check-ins, stretch breaks, etc. - early in the term will build collegiality. Planning learning experiences outside the classroom or off campus builds interest and breaks up the rhythm of classroom learning. Keep the atmosphere positive and supportive as the semester proceeds and student workloads increase.</p>
<p>How will we take into account student attention and energy levels and adjust teaching strategies accordingly?</p>	<p>Students will be seeing a lot of you if you are doing a lot of team teaching. Intentionally planning for a diversity of active learning strategies and assessments, including ones that put students centre stage and the teaching team in the wings, will help address this.</p>
<p>Other concerns or questions as the semester gets underway?</p>	

In mid-stream....

Regular consultations among co-teachers once the semester is underway are essential to keeping LC courses in synch and optimizing the learning environment for students. Agree on a regular weekly meeting time, and consider the following:

Are teachers consistently prioritizing team-teaching in each others' courses?	If so, they will naturally have a close familiarity with the progress of activities and units in both courses.
Is team-teaching more intermittent?	Communication is key. Check in with each other weekly to verify that plans for synchronized progress remain viable. Especially important is how student workload is playing out on the ground.
Is the "community" in your learning community gelling?	Be intentional about building in pro-social activities that support learning. Mix up group membership in class, take fun physical activity breaks in class, meet outside of class for events or meals.
Is the original timing of assessments holding up? And are teachers managing to give timely feedback on assessments?	Where possible, maintain staggering of assignments so student workload is reasonable. Turnaround on returning feedback and results to students should be roughly equitable in both courses.
Is scheduling of office hours (in person and virtual) permitting access to both teachers for all students?	Teachers might consider holding at least one common office hour where questions about integrative activities and assessments can be addressed simultaneously by both teachers.
Is student progress being discussed on a regular basis?	Take advantage of having two sets of eyes in the classroom, which permits problems to be identified, considered and addressed rapidly.
Once underway, is the class schedule proving flexible enough for spontaneous adaptations in activities, units and assessments?	If the LC is able to engage with rapidly emerging issues and circumstances, students will appreciate the relevance and authenticity of the learning experience.
In particular, are there opportunities to take the learning beyond the classroom?	Adding out-of-classroom activities on campus or in the community, while possibly disruptive on short notice, can add a welcome change of pace that re-energizes student engagement with course themes. When feasible, don't hesitate to

	give up some content in exchange for a rich experience.
Are you tracking feedback from students on how they are feeling and how the course is going? Build in opportunities for student input and engage them as co-designers.	Check-ins, two-minute surveys or polls, exit tickets, class discussion forum – all of these are channels you can maintain to gather student input. Talk through adaptations that they think will work.

Towards the end of term...

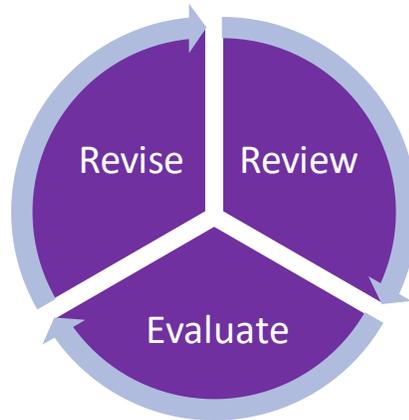
Documenting teaching materials, gathering representative student work and distributing exit surveys allows teaching teams to make evidence-based revisions and adaptations as they plan the next version of their LC. Documenting also allows LC programs to supplement reporting with artefacts that illustrate engagement and high-impact learning.

Select a variety of methods to document the impacts of your design and teaching efforts.	<ul style="list-style-type: none"> • Create a shared drive folder where duplicates of important teaching materials – powerpoints, handouts, assignments, rubrics, etc. – can be archived as the semester ends. • Ask students for permission to archive student work for the purposes of improving future iterations. • Administer student exit survey on engagement and learning. • Consider an informal self-administered faculty survey where you note your own professional and personal challenges and successes for future reference. • Taking pictures of in-class activities and out-of-classroom events allows you to build a shareable, high-impact visual record of the LC. This can be very powerful in the context of institutional reporting on the results and impacts of LC programs. Be informed of institutional policies on consent for photos.
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12/12

Reflect

Once the semester is over, reserve time to reflect on how things went and what changes are desirable. A three-step process could be the basis for an end-of-semester meeting in which the team looks back and plans ahead.



- A. Review – Compare representative examples of student work in light of your original integrative learning outcomes. Is there convincing evidence that students attained the outcomes?
- B. Evaluate – Assess what worked and what didn't in terms of key facets of course design: Integrative assignment; course units; key learning activities; other assessments and evaluation tools; out-of-classroom activities. Consider important student and teacher feedback, formal and informal
- C. Revise – Identify priorities and plan revisions for subsequent iteration.

Revision priorities:

- 1.
- 2.
- 3.
- 4.
- 5.

Resources

Introduction

Hill, W. L. (2013). "Interdisciplinary perspectives and the liberal arts." In *Remaking college: Innovation and the liberal arts*, 85-95.

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<https://dschool.stanford.edu/resources/design-thinking-bootleg>

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Dawson College Learning Communities. (2023). *Formats for interdisciplinary team teaching*.
<https://www.dawsoncollege.qc.ca/learning-communities/wp-content/uploads/sites/189/LC-Team-Teaching-Formats-F23.pdf>

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Smith, B. L., MacGregor, J., Matthews, R., & Gabelnick, F. (2009). *Learning communities: Reforming undergraduate education*.

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"Assessment 101: The Basics of Creating Learning Outcomes."
CampusLabs. 2016.
https://w2017dawsonlcs.files.wordpress.com/2018/03/assessment_101_writing_learning_outcomes_sszopinski.pdf

Wilson, L.O. (2020). "Understanding the revised version of Bloom's taxonomy." <https://thesecondprinciple.com/wp-content/uploads/2020/08/Blooms-revised-2020-PDF-version.pdf>

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Lardner, E., & Malnarich, G. (2008). "A new era in learning-community work: Why the pedagogy of intentional integration matters." *Change: The magazine of higher learning*, 40 (4), 30-37.

[*VALUE Rubric for Integrative Learning*](#). (2016). AACU.

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Bean, John C., and Dan Melzer. (2021). *Engaging ideas: The professor's guide to integrating writing, critical thinking, and active learning in the classroom*.

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Brecher Cook, D., & Worsham, D. (2018, April). "Let's Build Something!: A Rapid-Prototyping Instructional Design Workshop." Pre-conference workshop presented at the 2018 CARL Conference, The Academic Library in Times of Change, Redwood City, CA.
<https://dmcwo.github.io/dmcwo/presentations/lets-build-something-workshop>

Further reading

The [National Learning Communities Collaborative](#) hosts a wide range of practical and scholarly resources related to learning communities at colleges and universities across North America.