

# HyFlex Course Development Guide

**Designed by the Cambrian College  
Teaching & Learning Innovation Hub**

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# Introduction

Postsecondary education is changing rapidly. Students are demanding flexible, customizable, technology-enhanced learning opportunities that suit their busy lifestyles. With more postsecondary institutions offering online, distributed learning opportunities, students are no longer constrained by geographical location and can engage in high-quality educational experiences from anywhere, at any time, on any device.

## HyFlex Learning

To align with the way that students live, work, and learn today, Cambrian College is investing in the creation and delivery of HyFlex courses. The aim of this delivery mode is to offer students the maximum amount of choice possible within a formal learning program.

In a HyFlex course, students can choose between a variety of delivery modes, adapting their strategy to suit their needs and preferences at any time, without sacrificing the efficacy of their learning.

There are three ways that students can choose to participate:

### 1. In-person

This participation method looks similar to traditional classroom learning, in that students arrive to a classroom on a specific day and time, and meet with an educator who is physically present in the classroom. However, in-person attendees may interact with classmates who are attending class virtually. Technological solutions allow the in-person and online attendees to communicate with one another and the course instructor, to collaborate on course activities and assignments and to complete course assessments.

### 2. Synchronous Online

Students attend class virtually, in real-time. Live chat, video conferencing solutions, and collaborative technologies such as the Google Suite allow virtual students to be active participants in the learning experience, despite not being physically present in the classroom.

### 3. aSynchronous Online

Students can engage in learning at their own pace, completing coursework online either before or after the in-person learning has taken place. Students will interact with their peers and with the course instructor using asynchronous technologies which allow for reflection, collaboration and student-to-student interactions that are dispersed over a period of time.

To learn more about HyFlex learning, [please see this short presentation](#).

# Overall Development Process

This general process provides an overview of the major steps involved in a course development process. Though each course is unique, this overarching development process remains relatively unchanged. Once hired to develop a HyFlex course, the Course Developer (CD) will:

## 1) Develop the Course Outline (DCO)

The course outline (DCO) provides learners with an overall summary of the learning goals, evaluation methods and resources that will be incorporated into a course. It acts as a roadmap for you, course instructors, and students.

Your Dean or Academic Manager should provide you with a course title, code, description, and vocational learning outcomes. You will meet with [Mel Young, Quality Teaching Resource Centre Coordinator](#), to learn about backwards curriculum design; the importance of aligning outcomes to course assessments, activities, and content; who to go to for help with selecting course resources and technologies; receive some example DCOs to refer to as you create your own DCO; and provide you with your own [DCO template](#) to populate. Once hired, reach out to Mel as soon as possible to set up this initial meeting.

## 2) Develop the Syllabus

Once you've fully developed a draft DCO, you're ready to create the syllabus. This document describes course activities in a detailed, weekly format. Mel will provide you with the [syllabus template](#) to populate with the specific weekly topics, pre-work, reference materials, and assessments. The syllabus does not need to go into great detail about these items; rather, it provides students with an overview of weekly events and in this early planning stage, will help you visualize the discrete items that must be developed for the course.

## 3) First Checkpoint

Now that you've developed a draft DCO and syllabus, it's time to have those documents approved. Cambrian's Planning and Research department should review these documents first. Contact [Sherrill McCall](#), Dean of Planning and Research, to arrange a document handoff. It isn't uncommon that some minor revisions are required. Incorporate these revisions, then submit both the DCO and syllabus to your Dean or Academic Manager. This individual will review your documents once again, and may request a meeting to discuss your overall plan for the course. Once your DCO and syllabus have been approved, you've got the "green light" to start developing specific course components.

## 4) Develop Assessments, Activities, and Content

As soon as your DCO and syllabus have been approved, contact [Jessica O'Reilly, Instructional Developer](#) to arrange a meeting. Jessica will orient you to the digital assessment strategies available to you; the types of technology-enabled learning activities that you may wish to develop for the course; Cambrian's current content-conveyance software; and will remind you of the expectations related to alignment of course outcomes and discrete learning objects. You will also negotiate a content hand-off strategy for when you have completed the development process.

The bulk of the time spent on course development occurs during this phase. Contact Mel, Jess, your Dean, or Academic Manager if you have questions or concerns as you start building your discrete learning objects. You may find it helpful to build a simple timeline or Gantt chart. Think about all of the objects required to complete the course, what date you hope to complete the course, and then parse your time accordingly.

## 5) Second Checkpoint

Once you've finished the draft assessments, activities, and content, arrange to meet with your Dean or Academic Manager once again. This time, you will review the course components together. Once your Dean or Academic Manager approves the course components, submit them to Jessica for uploading/programming into the Moodle LMS. Jessica may reach out seeking clarification about certain course items. Once all of the components have been successfully uploaded into Moodle, you will have the opportunity to review your completed course.

# Course Developer Responsibilities

As a Course Developer, you are responsible for completing the following tasks. Timelines for completion will be negotiated with the Dean or Academic Manager.

## Dynamic Course Outline

- Establish evaluation plan, including assessment method, description, and value (%)
- List topics / concepts to be covered in the course, in linear sequence
- Develop course learning outcomes
- Develop course learning objectives
- Select relevant Essential Employability Skills
- Select HyFlex delivery method
- Select relevant learning activities
- Research and recommend appropriate resource materials, including textbooks, web-based resources, required software, etc.

## Course Syllabus

For each of the fifteen weeks the course will run, describe:

- The overarching topic to be explored
- Any preparatory work and formative activities students are expected to complete
- Related reference materials, including:
  - Textbook title and associated chapter(s) / page(s)
  - Additional learning resources (videos, web-based tools, instructor-generated content, etc.)
- Evaluated components (assignments, labs, tests) and due dates

## Course Content

Course content should be “chunked” into discrete, manageable units of learning. Typically, course developers follow a weekly, topical format. Aim to design each unit in a similar, predictable format. For each week, provide:

- A brief description** of why this week’s content is important and relevant to the course, and ultimately, to the students’ future employment.
- A short list of the week’s intended learning outcomes** (“By the end of this unit, students will be able to...”). These unit-level objectives should draw from the course level objectives.
- List all of the required readings and resources that students must work through.** Elaborate on the information provided in the Course Syllabus by explaining why, how, and in what order students should work through the resource materials. For example, if you include a YouTube video as a course resource, briefly explain your rationale for selecting that particular video, what students should pay close attention to, etc.
- Provide instructional materials.** You’ve been hired as a content developer because of your extensive subject-matter expertise. In a traditional delivery, your knowledge would typically be conveyed to students in an interactive lecture format which balances passive listening with active learning. Since HyFlex courses include both in-class and online deliveries, strategies for content conveyance will necessarily incorporate various educational technologies. As a first step in this process, draft a script of your lecture notes. Rather than focussing on HOW you will convey content to learners, write down WHAT you want to convey. Do not simply repeat the information students already encountered in the readings and resources. Instead:
  - Expand their understanding by providing important background information
  - Clarify important concepts by explaining them in a new way
  - Connect new information to previously learned concepts

- ❑ Provide real-life examples
- ❑ Prompt students to connect content with their lived experiences

At this initial stage of course development, your instructional materials need not be media-rich. Cambrian's Instructional Design team will work with the future course instructor to convert your preliminary content into more robust learning objects.

- ❑ **Describe learner activities.** In order to truly learn, students must be provided with opportunities to interact with content, peers, and professor. Now that students have worked through the reference and instructional materials, what will they DO? Activities should be relevant, preparing students for success in their evaluated coursework and in their future profession. Activities may be completed by individuals, small groups, or the entire class. They may include personal reflection, class discussion, concept mapping, case study, simulation, educational games, interviews, as well as evaluated course components such as assignments and quizzes.

## Course Assessments

- ❑ Develop the discrete course evaluations by drafting assignment descriptions and success criteria, quiz and test questions along with answer keys (where relevant), and any other evaluated components of the course.

# Backwards Curriculum Design

All course activities, including assessments, activities, assigned readings, discussions, etc. must serve a specific purpose. The purpose of a course is to provide students with opportunities to build their knowledge and skills so that they are equipped to meet the vocational standards, learning outcomes, learning objectives, and essential employability skills that you've identified on the DCO.

When most Course Developers are hired, they immediately start thinking about content and what the teacher should do, rather than learning outcomes. This approach, though common, is not ideal. Often called teacher-centered, this approach is indicative of a more traditional view of teaching and learning that is rooted in content-conveyance rather than deep learning. As our understanding of neuroscience has matured, we've realized that learning isn't simply a matter of reading or being told something. Rather, students must actively apply their learning; practicing skills and demonstrating their abilities to achieve the desired learning outcomes. This active approach to learning has been called "student-centered" as it focuses on what the learner will do, rather than what the teacher will do.

When you plan curriculum from a student-centered, outcomes-oriented approach, it makes little sense to begin by planning content. In fact, content should come last in the development process! If you start with the end in mind and work backwards, your development process will look a bit like:

## **1) What should students be able to know or do by the end of this course?**

You've already answered this first question on your DCO!

## **2) How can students provide evidence of their knowledge and abilities?**

This will come in the form of course assessments, which must be appropriately aligned with course outcomes. For example, if by the end of a course of study students should be able to design a document in Google Docs, it is inappropriate to test this ability using a multiple-choice quiz, as this assessment will not provide you with an adequate representation of the students' ability to design a GDoc. A more appropriate assessment would be for students to actually design a GDoc according to a specific set of criteria. Put simply, if students should be able to DO something, they should be assessed on their ability to do that thing. If students should KNOW certain information, it is important to provide them with opportunities to convey their knowledge, to the depth that is required and articulated on the DCO.

When you first met with Mel she likely introduced you to [Bloom's Taxonomy](#), a framework that places levels of learning in a hierarchy. Bloom's Taxonomy was helpful when you were developing learning objectives and outcomes, and it is helpful now that you're developing performance tasks.

## **3) What learning experiences and instruction will students require to become proficient?**

Ideally, students will have opportunities to attempt tasks and convey their knowledge before being graded on their abilities. This practice comes in the form of learning experiences and guided instruction. At this stage it is most appropriate to consider how students will practice and build their abilities, what information and skills students will need to be explicitly taught and guided on, how best to convey this information in light of the performance goals and assessment strategies, and finally, which resources are most appropriate, given the performance goals.

[This resource provides more information on backwards curriculum design.](#)

# Support

As a member of the Cambrian College community, you have access to many individuals who will be happy to assist you with the various aspects of the course development process.

## Project Manager

Your project manager will be Dean / Academic Manager who hired you. Don't hesitate to reach out to this individual if you are unclear about project deliverables, deadlines, payment schedules, etc. This person should be your go-to for information related to project logistics.

## QTRC Coordinator

[Mel Young](#)'s role is to support Cambrian faculty in their pursuit of pedagogical excellence. Go to her with your questions about teaching and learning, or if you're unsure about who to contact for what.

## Librarian

[Marnie Seal](#) is Cambrian's Faculty Librarian. She can help you source out course resources like textbooks, open educational resources, articles, etc. and can answer any questions you have about copyright.

## Instructional Developer

[Jessica O'Reilly](#) assists faculty with developing technology-enhanced educational experiences, provides guidance to online educators, and performs instructional design services.

## Video / Multimedia Production Specialist

Should you decide to develop instructional videos for your HyFlex course, [Jeffery Tranchemontagne](#) can provide video production services. You worry about the content, he films, edits, and uploads the final product into the Moodle LMS.

## Learning Technologies Specialist

[Orville Andrews](#) supports faculty in the use of the Moodle LMS, liaises with IT to provide faculty with appropriate hardware and software solutions, and works with vendors to integrate commercial resources into the Moodle LMS.

## Teaching & Learning Innovation Hub

Many of the individuals listed above belong to Cambrian's new Teaching & Learning Innovation Hub, a co-created community of practice that strives to foster creative and collaborative implementations of the College's Teaching and Learning Framework. The Hub empowers the Cambrian community to explore and inspire new perspectives in pedagogy, educational technology and curriculum design.

Come to the Hub to make use of our educational technologies, innovative workspace and just-in-time support services. Though the individuals staffing the Hub are already available on campus, we will be operating out our new location as of February 2018. Find us next to Cambrian International, in the former Fontaine Bleu.

# Cambrian's Educational Technologies

As you develop your HyFlex assessments, activities, and instructional materials, you'll need to leverage certain educational technologies. This list is not exhaustive, but will give you a good sense of what is available to you and currently in use at Cambrian.

## Conveying Content

### MOODLE RESOURCES

You can build and embed content right inside of Moodle. Some basic, entry-level options include:

#### Moodle Book Resource

Easily create a multi-page, book-like resource complete with chapters and sub-chapters. It's not meant to be flashy or interactive, but a simple, static resource.

#### Moodle Lesson Activity

Lessons include content pages and question pages. The intended purpose of this resource is to be adaptive and to use a student's responses to direct the lesson, kind of like a "choose your own adventure" story. Every selection that a student makes can reveal a different teacher response/comment and can send the student to a different page in the lesson. While it takes some strategic planning and development work, this activity can be a very powerful teaching tool since it offers each student a customized learning experience. Note: the embedded questions can be graded, so this tool could also fall under "Assessment" and "Learner Engagement / Interaction" as well.

#### Moodle Page Resource

Moodle Page creates a link to a static Moodle page that can contain text, images, audio, and video. It's very simple to create Moodle pages, but since students cannot download and print a Moodle page as easily as they can a PDF, Microsoft Word document or Google Doc, consider these other word processing options prior to developing within a Moodle page.

#### Moodle File Resource

Upload simple files like PDFs, Microsoft Word documents, PowerPoint presentations, image files, etc. You can include a file name, optional description, and specify display settings. Note that students can download files uploaded in the manner, but they will need the corresponding software to open the file (ie. If a student downloads a Microsoft Word document but does not have Word installed on their PC, they will encounter an error. For these reason, it may be optimal to consider free web-based applications such as Google Docs and Google Slides, since all students with an internet connection can access these tools.

#### Moodle Podcast Activity

Moodle Podcasts can be instructor created or uploaded by learners. Multiple settings allow you to specify whether or not students can comment, post additional podcasts, etc. First create an audio media file (.mp3 or .wmv) then upload the file using the Moodle Podcast Activity. Note that it is best practice to provide the full text of all audio content.

#### Moodle Label & URL Resources

Use the Moodle Label or URL Resource to link students to content available on the web, including websites, videos, Google Docs, etc. You can also insert videos hosted on third party platforms (YouTube, Vimeo) via embed code so that they appear right inside the Moodle course. Do not upload videos directly to Moodle as it will dramatically slow down the time it takes for the course to load.

#### Moodle Interactive Content (H5P) Activity

This cool new feature allows you to build interactive, mobile-friendly content right inside of Moodle. There's a bit of a learning curve involved, but the end result is far more aesthetically pleasing and engaging than a static Moodle book, lesson or page can ever achieve.



## WEB-BASED APPLICATIONS

### Google Apps

About a decade ago, Google declared war on Microsoft Office by offering free, web-based alternatives to the Microsoft Office Suite, particularly Word and PowerPoint through its web-based Google Docs, Google Slides and Google Drive products. These fully web-based tools work best in Chrome and allow up to 50 students to simultaneously view, comment on and/or edit a document (Google Docs), view and interact with content (Google Slides w/ Audience Q&A enabled), and share / manage files online (Google Drive). Not every student in your classroom will have easy access to the Office suite, and many students will be running different versions of Office, which leads to confusion. One simple solution may be to switch your word processing and slide presentation software to the Google suite, particularly if you want students to co-create and collaborate both in real time and asynchronously.

### Prezi

Prezi hit the scene about eight years ago, and was quite popular as an online alternative to PowerPoint. It's less "en vogue" now but may still offer you some interesting content-delivery options. The website allows you to access many beautiful pre-built templates, so you don't need to be a designer to build beautiful content. The free educator version, "EDU Standard Free" does not enable all of Prezi's features, so if this is an option you'd be interested in it may be worthwhile to investigate the subscriber versions of the app.

### PowToon

Quickly create kitschy cartoon-style presentations, add audio narration, and export to YouTube for embedding within your Moodle course. This option is not ideal for lengthy content; rather it's a visually interesting strategy for an instructor introduction, topic overview or recap - short, simple content.

### Sceencast-o-matic.com

This free web-based application allows you to create videos of your on-screen activity (this is called a screencast). This is great for short tutorials, demonstrations, visual presentations, etc. The free version allows you to create videos up to 15 minutes long, which can be saved as a video file or uploaded to YouTube. This entry-level platform is relatively easy to use, but offers little options for editing and enhancing the videos (think quick and simple).

## CAMBRIAN-APPROVED SOFTWARE

### Microsoft Office Suite

At Cambrian, we're a Microsoft shop, and as such many professors utilize Microsoft Word and PowerPoint to convey content to students. PowerPoint presentations intended for online viewing can be enriched with slide notes, audio narration, and automatic transitions so that a clean, narrated video of the presentation can be uploaded to YouTube and embedded into Moodle. "Lecturing" in this manner creates a product of much higher quality than the live AV that is captured in the Virtual Classroom environment (ie. easier to see, easier to hear). Word Documents can be uploaded directly into Moodle and need not be converted into a read-only format prior to being made available to students.

### iSpring Presenter 7

This is a souped-up version of PowerPoint that allows you to insert quizzes, surveys, and interactions into a traditional PowerPoint-style slide presentation. Since it tacs features onto .ppt, it feels fairly accessible to a new user. Warning: tends to crash unexpectedly, no MAC support, relatively few interactive options.

### OfficeMix

This free .ppt add-on is an ideal first step toward adding interactivity to PowerPoint presentations, because it's EASY! If you are comfortable working in .ppt, you'll be comfortable working in Office Mix.

### Camtasia

This software program allows you to create high-quality screencast videos complete with audio, animations, annotations, etc. It is extremely robust, but as such, there is a considerable learning curve involved. This tool is great for detailed, technical walkthroughs of software programs, processes, etc.

## Assessment Tools

Assessments are important elements of any course, since they allow students to demonstrate proficiency in the stated course and program-level outcomes and objectives. There are two main types of assessments: summative and formative. Summative assessments are typically graded activities occurring at the end of a unit of study that allow the educator to evaluate whether or not the student has achieved the intended learning outcomes. Formative assessments, by contrast, are not always graded, appear at any point during the learning process and are mainly used to diagnose where students are in their learning. Formative assessments help students identify at what level they are currently performing, and can be leveraged by educators to remediate knowledge gaps, etc.

### MOODLE RESOURCES

#### Moodle Assignment Activity

Students submit digital files to an electronic dropbox for formative assessment. File types include word-processed documents, spreadsheets, images, audio and/or video clips, or text typed directly into a submission box. At Cambrian we discourage the uploading of large files (over 50MB) and instead encourage students to upload to a third party platform and link to Moodle. The assignment activity can be enabled / disabled at certain dates and times (to create electronic due dates), can include advanced grading options such as objective scoring rubrics and checklists, and is a common method for collecting, marking and returning graded student assignments.

#### Moodle Quiz Activity

Design electronic tests or quizzes right in Moodle. This tool offers a variety of question types, scoring methods, feedback options, and scoring capabilities, with some questions being automatically graded and others requiring manual scoring. This is a very common strategy for assessing student learning both formatively and summatively.

#### Moodle Choice, Questionnaire and Survey Activities

All of these options allow instructors to quickly solicit student opinions, understandings, etc. Not ideal for graded activities.

#### Moodle MEDIAL Assignment Activity

Embed a video into your course, then use this feature to insert knowledge-testing questions at specific moments within the video. A great way to make video content even more engaging. Can be used formatively or summatively.

## Learner Engagement / Interaction

### MOODLE RESOURCES

#### Moodle Forum Activity

Students and educators can exchange ideas by asynchronously posting text-based comments, audio and video file links to a discussion forum in Moodle. There are several types of forums, and participation may or may not be graded.

#### Moodle Chat

The Moodle Chat activity allows course participants to have text-based conversations in real-time, within a Moodle course.

### WEB-BASED APPLICATIONS

#### Padlet

Imagine a blank piece of paper, but on the web. Students can easily access a free, online "wall" to post thoughts, responses and multimedia to. Cambrian faculty who use this tool love it's simply interface. Expect a minimal learning curve while maximizing community building and collaboration between the in-class and online students.

### **Quizlet**

This free web-based application allows students and teachers alike to quickly generate learning tools in a game-like environment. After completing some simple data entry, the website creates many study tools such as flashcards, fill in the blanks style quizzes, matching activities, a gravity game (answer the question before the asteroid smashes you!), etc. The website also has a text-to-speech feature, so auditory learners can choose to listen to the content they are reviewing. A great tool for rote learning.

### **Nearpod**

While it's best to develop Nearpod lessons online, students will access the lessons via a free app that they would need to download to their devices (PC users and students who don't want to download the app can access via URL). Nearpod is an interactive presentation and assessment tool. It can be quite powerful, particularly in a HyFlex environment, as educators can enrich passive content with a plethora of multimedia, interactions and formative and/or diagnostic assessment opportunity.

### **Kahoot**

Kahoots are best conducted in real-time, either as a diagnostic assessment opportunity or content review session. The free web-based application automatically layers on gamification elements. You type in the information, it spits out a flashy "game" for students to play on any device that has an internet connection. Kahoot can also be used to conduct informal class polls, surveys, and discussions.

## **CAMBRIAN-APPROVED SOFTWARE**

### **Skype for Business / Microsoft Lync**

Create online meetings, share presentation materials and even your computer screen. Communicate via instant message, audio and/or video calls involving up to 250 people.