

Alignment and mapping

Course alignment is the act of demonstrating the connections between learning objectives, activities, and assessments across a learning experience. It typically occurs in two directions. First, you must confirm the alignment of course objectives with existing institutional or program objectives, as well as with professional standards, when applicable. Once course objectives are set, you must curate or design all learning materials, activities, and assessments with those objectives in mind.

Objective alignment

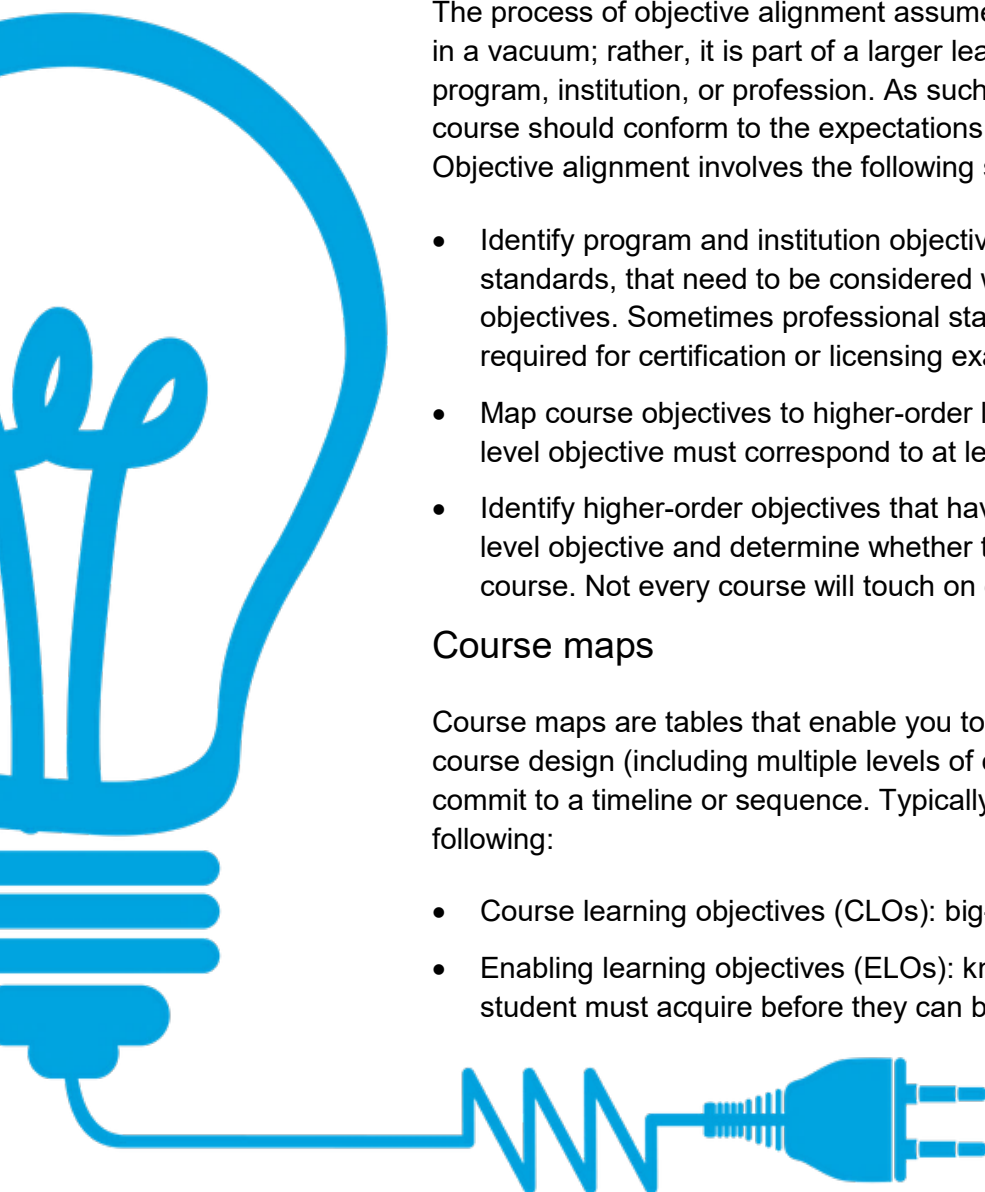
The process of objective alignment assumes that your course does not exist in a vacuum; rather, it is part of a larger learning journey that involves a program, institution, or profession. As such, what students learn in your course should conform to the expectations of all relevant stakeholders. Objective alignment involves the following steps:

- Identify program and institution objectives, as well as any professional standards, that need to be considered when writing course learning objectives. Sometimes professional standards are related to knowledge required for certification or licensing exams in a professional field.
- Map course objectives to higher-order learning objectives. Each course-level objective must correspond to at least one higher-order objective.
- Identify higher-order objectives that have not been mapped to a course-level objective and determine whether they are within the scope of the course. Not every course will touch on every higher-order objective.

Course maps

Course maps are tables that enable you to lay out the major elements of the course design (including multiple levels of objectives) without being forced to commit to a timeline or sequence. Typically, course maps include the following:

- Course learning objectives (CLOs): big-picture goals of the course
- Enabling learning objectives (ELOs): knowledge, skills, or attitudes a student must acquire before they can be expected to achieve CLOs



- Learning materials: content resources that students use to learn, such as readings, media, Web resources and databases, and presentations
- Learning activities: actions students engage in to learn, ranging from assimilative (e.g., reading, watching) to active (e.g., discussing, building, experiencing)
- Learning assessments: documentation that students achieved learning objectives

Backward design

Building a course map is a critical component of engaging in backward design, which is a model of instructional design in which you start with the desired outcomes (or objectives) and build backward from there. The map is helpful for keeping track of all the pieces and how they fit together. Maps are typically completed in the following order:

1. Objectives (CLOs and ELOs): What should students be able to do?
2. Assessments: What evidence would be acceptable to show that students have achieved the objectives?
3. Learning activities: How will students learn—that is, how will they assimilate, interpret, practice, and demonstrate—what is necessary to succeed on the assessments?
4. Learning materials: What support materials do the students need to engage in the learning activities?

Keep in mind that students must be exposed to content and processes and have the opportunity to practice before assessment. Therefore, every learning objective needs at least one learning activity linked to it. Note, too, that learning activities and assessments may address more than one learning objective.

Resources

There are many resources available to assist instructors in course alignment and mapping. Select the links below to learn more about course mapping from the following educational organizations and institutions:

- Carnegie Mellon University: [Alignment](#)
- University of Colorado Denver: [Assessment and instructional alignment: An online tutorial for faculty](#)
- Vanderbilt University: [Understanding by design](#)