

Defining Features: Capstone

Key Features

A capstone course is usually a culminating academic experience that ties together all previous courses in an academic discipline and facilitates transition to a chosen career or graduate program. Capstones, as culminating educational experiences, are expected to meet many purposes: synthesis and application of prior learning, developing skills and attributes related to employability, and more recently, quality assurance.

Key Design Considerations

Some key questions to consider when designing a capstone course:

- What are the goals and objectives sought by creating or adopting a capstone course?
- Is the capstone intended to be discipline-specific or interdisciplinary? Particularly in discipline-specific instances, how might professional standards play a role in capstone course development?
- What structural framework for the course will successfully conform to the existing curriculum?
- Should adjustments be made to the existing curriculum to support the planned capstone experience?
- Are there specific courses that have content that needs to be addressed or informed by this course?

In addition to the questions above, other design elements may warrant consideration. For example, whether discipline-specific or interdisciplinary, collaboration among various stakeholders is an important design feature to consider given the cumulative nature of the course. As identified by Hauhart and Grahe, (2015) one of the most important elements in the creation of a capstone course is the coordination and complementarity between the courses leading up to the capstone and the capstone itself.

Particular attention should be given to identifying assessment techniques that capture whether learning has occurred across the contributing coursework. Oral presentations and major projects (group or individual) are the most commonly used means to assess the cumulative student learning.

Contextual Variations

One variation may be between graduate capstone courses and those at the undergraduate level. The major difference may be that at the undergraduate level, one aim of a capstone course could be to prepare the students for entry into the chosen career or graduate program. The aim for the graduate capstone may be more geared to preparing students for a tenure track faculty position or a profession such as physical therapy, business, nutrition, or law among others.

Capstone courses may be specific to a discipline, being created or adopted by a program or major and thus focus on the content and experiences of that course of study. Capstone courses encompassing the integrative learning over the progression of the general education experience would focus on broader experiences within university offerings and may speak to university learning outcomes as opposed to program learning outcomes.

It is conceivable that a capstone could be implemented in a discipline minor or certificate to stress the interrelated content of the minor and perhaps to contribute to program assessment.

Selected Resources

- Boyer Commission. (1998). Reinventing undergraduate education: A blueprint for America's research universities. Position paper, Boyer Commission on Educating Undergraduates in the Research University, Stony Brook, NY.
- Cuseo, J. B. (1998). Objectives and benefits of senior year programs. In The Senior Year Experience: Facilitating Integration, Reflection, Closure, and Transition, edited by J. Gardner, G. Van der Veer, and Associates. San Francisco, CA: Jossey Bass Publishers.
- Henscheid, J. M. (2000). Professing the Disciplines: An Analysis of Senior Seminars and Capstone Courses. Monograph No. 30. Columbia, SC: University of South Carolina.
- Huber, M. T., and P. Hutchings. (2004). Integrative Learning: Mapping the Terrain. Washington, D.C.: Association of American Colleges and Universities and the Carnegie Foundation for the Advancement of Teaching.
- Hauhart, R. C., Grahe, J. E. (2015). *Designing and Teaching Undergradute Capstone Courses.* San Francisco: Jossey-Bass.