HIGH-IMPACT ES CAPSTONES @UND

Capstones are culminating educational experiences, and therefore should involve content and activities that reflect both depth and breadth of learning. HIPs typically involve both Essential Studies knowledge and proficiencies and discipline-specific knowledge and proficiencies, with students asked to synthesize and apply learning from their discipline and from their broader liberal arts education. However, a capstone would not likely meet HIP standards based simply on being taken near or just before graduation, because it serves as a course that typically occurs at the end of most students' curriculum, or because it is an Essential Studies capstone.

To qualify as a high-impact capstone, **the following three required key elements must be present, along with three additional recommended elements.**

Key Elements	Required?	Expected Features	Illustrative Examples
Performance expectations set at appropriately high levels	Yes	Performance expectations should be reflective of a true culminating undergraduate educational experience. Students should demonstrate achievement levels that clearly signal their likelihood to succeed in a career or during their time in graduate school.	As part of a design project, student work extends from initial idea development through concept, design, construction, documentation, and presentation stages. The work at each stage is expected to be of high-quality, but in addition the stages are connected and synthesized in a way that makes clear the student's comprehensive understanding and ability to bring to bear academic skills learned throughout the undergraduate curriculum – such as a high-level of written and oral communication ability, strength in analyzing and solving complex problems, and the ability to deal effectively and comprehensively with a wide variety of information.
Significant investment of time and effort by students over an extended period of time	Yes	An activity that comprises at least one credit worth of work, and often would be more.	As a portion of a capstone course, students invest at least eight weeks of significant time on a single cohesive project, either individually or as part of a group.
Periodic, structured opportunities to reflect and integrate learning	Yes	Activities that require students to draw deeply on knowledge and proficiencies gained throughout their program of study (both ES and discipline-specific) in a manner that requires critical thinking (i.e., analysis, evaluation, synthesis) and integration.	A portfolio in which students explain how the artifacts in it represent the knowledge and proficiencies gained during their program of study; a capstone course linked with an internship/practicum in which students reflect on and integrate what they have learned in their academic courses with what they are experiencing in practice; a problem-based project in which students are given a problem they must solve drawing on interdisciplinary knowledge gained throughout their program of study.
Interactions with faculty and peers about substantive matters	Recommended	Activities that promote student interaction with faculty, peers, and/or community partners which contribute to their knowledge.	Small group discussions each week; student lead presentations; attendance at out-of-class events which provide opportunities to dialogue with peers, faculty and/or community partners; students come together at least once weekly to attend an enrichment event such as a lecture by a

			visiting dignitary and/or discuss common readings and assignments.
Opportunities to demonstrate intercultural knowledge & skills, wherein students are exposed to people, circumstances, and ideas that differ from those with which they are familiar	Recommended	Opportunities to demonstrate intercultural awareness and skills through significant interaction with others from different backgrounds and/or opportunities to apply in-depth knowledge of diversity and cultural competence to contemporary issues.	A research paper which explores an issue from different cultural perspectives (i.e., different cultural beliefs about child rearing or medical care); a service-learning project in which students interact with and learn about a different demographic (i.e., homeless population, different religious communities); as part of a group project, students from diverse backgrounds work together.
Frequent, timely, and constructive feedback	Recommended	Feedback can come from faculty, peers, and/or outside individuals assisting with the task, and can be written and/or verbal. Feedback should reflect on accomplishments, comment on both positives and negatives of work completed, provide suggestions for a path forward, incorporate past feedback into current feedback, and be actionable. Over the period of time students work on a task, there should be at least four instances of substantive constructive feedback.	Over the course of a semester, students receive bi-weekly faculty feedback on their progress, in written or oral form; quick comments and suggestions (from peers and/or faculty) occur on a regular and frequent basis as tasks progress, with formal documented feedback (or oral feedback where multiple people are present) occurring at least three times. One of these might be an oral progress report midway through, where faculty, peers, and/or outside individuals provide feedback.
Opportunities to discover relevance of learning through real-world applications	Recommended	Course activities, discussions, and research should address subjects that are relevant to experiences the student would have outside of the university. Students must demonstrate the ability to integrate information from their educational experiences within their discipline.	The subject of students' signature project receives significant input and feedback from experts/employers from the profession, and the final project demonstrates comprehensive understanding of how academic activities and learning directly apply to a real-world setting; an internship/practicum experience; applying knowledge to solve problems/issues within the discipline, community, and/or local-global community.
Public demonstration of competence	Recommended	Students demonstrate competence publically in a format relevant to their field of study. This demonstration should provide students the opportunity to showcase integrated learning throughout their course of study.	A public talk; presenting a poster at a campus-wide research event; a public art exhibit; a public recital; an engineering design expo.

Developed by Ryan Zerr, Donovan Widmer, Duane Helleloid, Kouhyar Tavakolian, Mark Dusenbury, Roxanne Hurley and Anne Walker.