

Center Pair Exploration Course Guidelines

Created by CPE Working Group, Spring 2017

Revised after CPE Summit, Spring 2019

What is vision for CPE courses?

Each CPE course will take shape around a specific problem space, which will evolve and develop throughout the semester in response to student curiosity. With a provided foundation of disciplinary methodologies and frameworks, student projects will begin in the first weeks of the course. For the rest of semester, the classroom will serve as a platform for collaborative inquiry into the complexities of topics, including how to skillfully identify a problem, how to meaningfully ask questions about a problem, and how to learn, across disciplines, what one needs to know in order to engage the problem in sophisticated ways.

How do CPE courses count toward student degrees?

CPE courses will be 200 level courses taken by students between their second and sixth semesters of college. Students are limited to one CPE per semester and must take a total of two CPE courses, each in a different area (CPEA = Arts, CPEB = Social and Behavioral Sciences, CPEC = Humanities, CPED = Biological and Natural Sciences). It should be noted that students now are able to take a CPE in an area in which their major resides. Please see the revised 2019-2020 catalog for detailed information about this requirement.

CPE courses may count as Race, Power and Perspective (RPP) courses, Data Analytics (DA) courses, Writing Enriched Curriculum (WEC) courses, Community Based Learning (CBL), or Environmental Sustainability (ES) courses, as long as the instructor successfully pursues that designation appropriately through the Curriculum Committee or other designated body.

How are CPEs unique from other courses?

In terms of the student experience in these courses, students will engage in sustained, collaborative problem-based learning to explore and address a contemporary issue using disciplinary/interdisciplinary methodologies and frameworks. Students will reflect on their positionality in the context of the problem and how others have a different relationship to the problem. With scaffolded guidance from the faculty member, students will have agency in the direction of their research/project, enhancing engagement with the associated work. Importantly, students will gain skills at effective collaboration and teamwork as they work with and build community with those not like themselves.

In terms of the faculty design of these courses, several pedagogies that have been shown to be effective at enhancing learning and engagement will be employed. Courses will:

1. Be project and/or problem-based^{1,2,3}
2. Be interdisciplinary in terms of methods/lenses students will be exposed to as well as content^{4,5,6}
3. Facilitate student agency in learning^{7,8}
4. Include scaffolded assignments that have a clearly articulated purpose, set of instructions and criteria for evaluation^{9,10,11,12}
5. Build a sense of community among the class^{13,14,15,16}
6. Include collaboration^{17,18,19, 20}

What are the Learning Outcomes associated with CPEs?

1. Students will recognize and utilize disciplinary approaches and methods to explore a contemporary topic/problem as well as possible solutions/paths forward.
2. Students will be able to identify their own collaborative skills, differentiate different work styles of those in their group, and adapt their behavior/processes to assist their group towards successful completion of a sustained group project.

- Students will investigate their own role in the topic/problem, developing a critical self-awareness of one's relationship to the matter, and how this may differ from other's roles.

How do CPEs relate to our college-wide Learning Outcomes?

Students in CPE courses will create a piece of work that will go into their ePortfolio, particularly addressing the campus-wide outcome "Collaborate with others, including those not like themselves, to bring to bear multiple disciplinary perspectives employing various modes of communication." The piece of work can be a traditional display of learning (paper, poster, presentation), but other demonstrations of learning are also encouraged (videos, performances, creative pieces, apps, websites, etc.).

How are CPE courses developed and approved?

Courses may be taught as individuals or as teams. Those that elect to team-teach a course must each be directly responsible for their own classroom/cohort of students (a team of 2 could team-teach two sections of students or team teach a single section of ~40 students, a team of 3 could team-teach three sections of students). This is necessary for the financial viability of these courses.

Courses will be developed by a faculty member with collaboration from an interdisciplinary advisor that provides significant input from outside of the teaching faculty's discipline. This advisory faculty member may simply consult on the course and never teach it, could teach an additional section of the course simultaneous to their fellow course developer, or could teach the course alternate semesters/years to their fellow course developer.

Applications to develop CPE courses will be submitted to the Curriculum Committee for approval.

¹ Barrows, H. S., & Tamblyn, R. M. (1980). *Problem-based learning: An approach to medical education*. Springer Publishing Company.

² Duch, B. J., Groh, S. E., & Allen, D. E. (2001). *The power of problem-based learning: a practical "how to" for teaching undergraduate courses in any discipline*. Stylus Publishing, LLC.

³ Nilson, L. B. (2016). *Teaching at its best: A research-based resource for college instructors*. John Wiley & Sons.

⁴ Biggs, J. B. (2003). *Teaching for quality learning at university: What the student does* (2nd ed.). Buckingham: Open University Press.

⁵ Lattuca, L. R., Voigt, L. J., & Fath, K. Q. (2004). Does interdisciplinarity promote learning? Theoretical support and researchable questions. *The Review of Higher Education*, 28(1), 23-48.

⁶ Spelt, E. J., Biemans, H. J., Tobi, H., Luning, P. A., & Mulder, M. (2009). Teaching and learning in interdisciplinary higher education: A systematic review. *Educational Psychology Review*, 21(4), 365.

⁷ Weimer, M. (2002). *Learner-centered teaching: Five key changes to practice*. John Wiley & Sons.

⁸ Wright, G. B. (2011). Student-centered learning in higher education. *International Journal of Teaching and Learning in Higher Education*, 23(1), 92-97.

⁹ Applebee, A. N., & Langer, J. A. (1983). Instructional scaffolding: Reading and writing as natural language activities. *Language arts*, 60(2), 168-175.

¹⁰ Lonka, K., & Ahola, K. (1995). Activating instruction: How to foster study and thinking skills in higher education. *European journal of psychology of education*, 10(4), 351-368.

¹¹ Sharma, P., & Hannafin, M. (2005). Learner perceptions of scaffolding in supporting critical thinking. *Journal of Computing in Higher Education*, 17(1), 17-42.

¹² Winkelmess, M. A., Bernacki, M., Butler, J., Zochowski, M., Golanics, J., & Weavil, K. H. (2016). A Teaching Intervention that Increases Underserved College Students' Success. *Peer Review*, 18(1/2), 31

¹³ Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. University of Chicago Press, 5801 S. Ellis Avenue, Chicago, IL 60637.

¹⁴ Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belonging in college freshmen at the classroom and campus levels. *The Journal of Experimental Education*, 75(3), 203-220.

¹⁵ Hove, M. J., & Risen, J. L. (2009). It's all in the timing: Interpersonal synchrony increases affiliation. *Social Cognition*, 27(6), 949-960.

¹⁶ Zubrunn, S., McKim, C., Buhs, E., & Hawley, L. R. (2014). Support, belonging, motivation, and engagement in the college classroom: A mixed method study. *Instructional Science*, 42, 661-684.

¹⁷ Totten, S., Sills, T., Digby, A., & Russ, P. (1991). Collaborative learning: A guide to research. *Scandinavian Journal of Educational Research*, 33(4), 231-243.

¹⁸ Gokhale, A. A. (1995). Collaborative learning enhances critical thinking.

¹⁹ Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2011). *Student success in college: Creating conditions that matter*. John Wiley & Sons.

²⁰ Davidson, N., Major, C. H., & Michaelsen, L. K. (2014). Small-group learning in higher education—cooperative, collaborative, problem-based, and team-based learning: an introduction by the guest editors. *Journal on Excellence in College Teaching*, 25(3&4), 1-6.