Best Practices for Common Core Course Design, Pedagogies and Assessment

1. Align teaching and learning activities and assessments with intended learning outcomes and competency.

2. Write effective learning outcomes/competencies by selecting active, measurable verbs that you want students to achieve at the end of the course. Avoid using words *like know, understand*, or *appreciate* which are difficult to measure. Consider using more specific words like *recall, explain,* or *differentiate* for writing effective learning outcomes/competencies.

3. Adopt research-informed teaching approaches.

4. Spend class time in helping students to understand the concepts and acquiring the competencies, rather than facts.

5. Provide timely feedback. (The more immediate the feedback, the more effective it is in aiding students' learning.)

6. Promote self-reflection and allow for students' personalization of the subject matter, such as location-based field work as well as other hands-on activities.

7. Encourage and provide opportunities to support student engagement and collaboration by using active learning strategies such as:

    - Demonstrations
    - Think-pair-share
    - Peer instruction
    - Problem-solving
    - Minute papers/reflections
    - Sticky-note clustering
    - Concept map
    - Student-generated test questions
    - Decision-making activities
    - (Real-life) case study
    - Structured debates
    - Fishbowl
    - iPRS
    - Team-based learning
    - Blended learning
    - Experiential learning

8. Scaffold learners with diverse skills, learning styles, and knowledge levels (i.e., offer differentiated instruction, giving novice learners information and support they need, without slowing down advanced learners, who can go right to what they need).

9. Promote continued and distributed learning, not "cramming"—e.g., by incorporating more low-stake quizzes, cumulative tests, individual or group projects, writing, and portfolios supported by rubrics.

10. Use multiple approaches—e.g., machine grading (multiple choice, numerical computations), including the use of Scantron item test banks and of "clickers" (to assess students' understanding of concepts as they are being presented); instructor grading (open-ended responses); peer grading and "teach-back" strategies; self-assessment; multimodal activities (to address different learning preferences); and assessments embedded both within and after modules.

11. Incorporate both formative assessments (i.e., low stake and on-going assessment tasks that can be used to monitor their learning progress and guide improvements) and summative assessments (i.e. evaluate student learning at the end of the semester) at multiple points during a course, as well as at the end.

12. Use rubric to evaluate students' academic knowledge and competency in grading and providing feedback for students. A rubric is a scoring tool that identifies the different criteria that is relevant to an assignment, assessment, or learning outcome, and states in a specific, clear, and objective way the possible levels of achievement.

13. Share and explain the rubrics to students before giving them the assessment task.

14. Communicate your expectations to students and assess student work fairly and efficiently. Use rubrics to provide students with informative feedback not only on their strengths but also on their weaknesses so that they can reflect on their performance and work on areas that need improvement.