CWSEI Teaching Practices Inventory

To create the inventory we devised a list of the various types of teaching practices that are commonly mentioned in the literature. We recognize that these practices are not applicable to every course, and any particular course would likely use only a subset of these practices.

We have added places that you can make additions and comments and we welcome your feedback.

It should take only about 10 minutes to fill out this inventory.

Please fill out the inventory for the current Term, Lecture sections only.

Course number: Section #(s) or Instructor name: Total number of students in sections you taught (approximate):

I. Course information provided to students via hard copy or course webpage. (check all that occurred in your course)

- □ List of topics to be covered
- □ List of topic-specific competencies (skills, expertise, ...) students should achieve (what students should be able to *do*)
- □ List of competencies that are not topic related (critical thinking, problem solving, ...)
- □ Affective goals changing students' attitudes and beliefs (interest, motivation, relevance, beliefs about their competencies, how to master the material)
- □ Other (please specify)

If you selected other, please specify _____

II. Supporting materials provided to students (check all that occurred in your course)

- □ Student wikis or discussion boards with little or no contribution from you.
- □ Student wikis or discussion boards with significant contribution from you or TA.
- $\hfill\square$ Solutions to homework assignments
- □ Worked examples (text, pencast, or other format)
- Practice or previous year's exams
- □ Animations, video clips, or simulations related to course material
- Lecture notes or course Powerpoint presentations (partial/skeletal or complete)
- □ Other instructor selected notes or supporting materials, pencasts, etc.
- Articles from scientific literature
- □ Other (please specify)

If you selected other, please specify _____

III. In-class features and activities

A. Various

Give approximate average number:

Average number of times per class: pause to ______ask for questions

Average number of times per class: have small group discussions or problem solving

Average number of times per class: show demonstrations, simulations, or video clips

Average number of times per class: show demonstrations, simulations, or video where students first record predicted behavior and then afterwards explicitly compare observations with predictions

Average number of discussions <u>per term</u> on why material useful and/or interesting from students' perspective

Comments on above ((if	any	1)	:	
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Check all that occurred in your course:

- □ Students asked to read/view material on upcoming class session
- □ Students read/view material on upcoming class session <u>and</u> complete assignments or quizzes on it shortly before class or at beginning of class
- □ Reflective activity at end of class, e.g. "one minute paper" or similar (students briefly answering questions, reflecting on lecture and/or their learning, etc.)
- □ Student presentations (verbal or poster)

Fraction of typical class period you spend lecturing (presenting content, deriving mathematical results, presenting a problem solution, ...)

O 0-20%
O 20-40%
O 40-60%
O 60-80%
O 80-100%

Considering the time spent on the major topics, approximately what fraction was spent on the *process* by which the theory/model/concept was developed?

○ 0-10%
○ 11-25%
○ more than 25%

B. Personal Response System (PRS)

If a student response system is used to collect responses from all students IN REAL TIME IN CLASS, what method is used? (check all that occurred in your course)

□ electronic ("clickers") with student identifier

electronic anonymous

 $\hfill\square$ colored cards

□ raising hands

□ written student responses that are collected and reviewed in real time

□ Other (please specify)

If you selected other, please specify _____

Number of PRS questions posed followed by student-student discussion per class

Number of times PRS used as quiz device (counts for marks and no student discussion) per class

IV. Assignments (check all that occurred in your course)

- □ Problem sets/homework assigned or suggested but did not contribute to course grade
- Problem sets/homework assigned and contributed to course grade at intervals of 2 weeks or less
 Paper or project (an assignment taking longer than two weeks and involving some
- degree of student control in choice of topic or design)
- □ Encouragement and facilitation for students to work collaboratively on their assignments
- □ Explicit group assignments
- □ Other (please specify)

If you selected other, please specify _____

V. Feedback and testing; including grading policies (check all that occurred in your course)

A. Feedback from students to instructor during the term

- □ Midterm course evaluation
- □ Repeated online or paper feedback or via some other collection means such as clickers
- □ Other (please specify)

If you selected other, please specify _____

B. Feedback to students (check all that occurred in your course)

- Assignments with feedback before grading or with opportunity to redo work to improve grade
- □ Students see graded assignments
- Students see assignment answer key and/or grading rubric
- □ Students see graded midterm exam(s)
- □ Students see midterm exam(s) answer key(s)
- □ Students explicitly encouraged to meet individually with you
- □ Other (please specify)

If you selected other, please specify _____

C. Testing and grading

Number of midterm exams	
Approximate fraction of exam mark from	%
questions that required students to explain	
reasoning	

Approximate breakdown of course mark (% in each of the following categories)

Final Exam	%
Midterm Exam(s)	%
Homework assignments	%
Paper(s) or project(s)	%
In-class activities	
In-class quizzes	%
Online quizzes	
Participation	%
Lab component	%
Other	%
If you selected other, please specify:	

VI. Other (check all that occurred in your course)

- Assessment given at beginning of course to assess background knowledge
- □ Use of instructor-independent pre-post test (e.g. concept inventory) to measure learning
- □ Use of a consistent measure of learning that is repeated in multiple offerings of the course to compare learning
- Use of pre-post survey of student interest and/or perceptions about the subject
- □ Opportunities for students' self-evaluation of learning
- □ Students provided with opportunities to have some control over their learning, such as choice of topics for course, paper, or project, choice of assessment methods, etc.
- New teaching methods or materials were tried along with measurements to determine their impact on student learning

VII. Training and guidance of Teaching Assistants (check all that occurred in your course)

- No TAs for course
- TAs must satisfy English language skills criteria
- \Box TAs receive $\frac{1}{2}$ day or more of training in teaching
- □ There are Instructor-TA meetings every two weeks or more frequently where student learning and difficulties, and the teaching of upcoming material are discussed.
- □ TAs are undergraduates
- □ TAs are graduate students
- □ Other (please specify)

If you selected other, please specify _____

VIII. Collaboration or sharing in teaching

- □ Used or adapted materials provided by colleague(s)
- Used "Departmental" course materials that all instructors of this course are expected to use

Discussed how to teach the course with colleague(s)

O 1 Never
O 2
O 3
O 4
O 5 Very Frequently

Read literature about teaching and learning relevant to this course

O 1 Never
O 2
O 3
O 4
O 5 Very Frequently

Sat in on colleague's class (any class) to get/share ideas for teaching

O 1 Never
O 2
O 3
O 4
O 5 Very Frequently

IX. General (open-ended comments)

Please write any other comments here. If this inventory has not captured an important aspect of your teaching of this course, or you feel you need to explain any of your above answers please describe it here.

Approximately how long did it take you to fill out this inventory?

We thank you for taking the time to fill out this inventory.