Instructions for Core Assessment Plans

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I. Introduction. You are the instructor of a course that is intended to satisfy one of eight General Education Core Curriculum requirements at UTD. To insure that courses address general education goals, the UTD Core Curriculum Committee (CCC) has established a number of student learning objectives that each of the eight types of Core Course must minimally address. These objectives were adapted from State of Texas Higher Education Coordinating Board objectives.

The purpose of your Core Assessment Plan is to create the blue-print for gathering assessments to be incorporated into the Core Assessment Report that you must submit at the end of the semester. You will use these assessments to evaluate how successfully your course achieved the Core Curriculum Learning Objectives and then use these results to formulate ways to improve the course's specific objectives, assessments, and learning activities in the future.

II. Submission Process and Timeline. Here are the steps in the process:
1. Instructors submit Assessment Plan via the online Assessment Tool by February 9, 2007.
2. CCC reviews Plan and either approves or requests specific revisions by February 19, 2007.
3. Instructor gathers and records assessments over the course of the semester.
4. Instructor submits completed Assessment Report via online Assessment Tool by May 14, 2007.
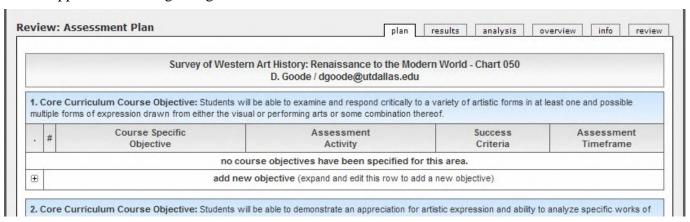5. CCC reviews Report and either approves or requests specific revisions.
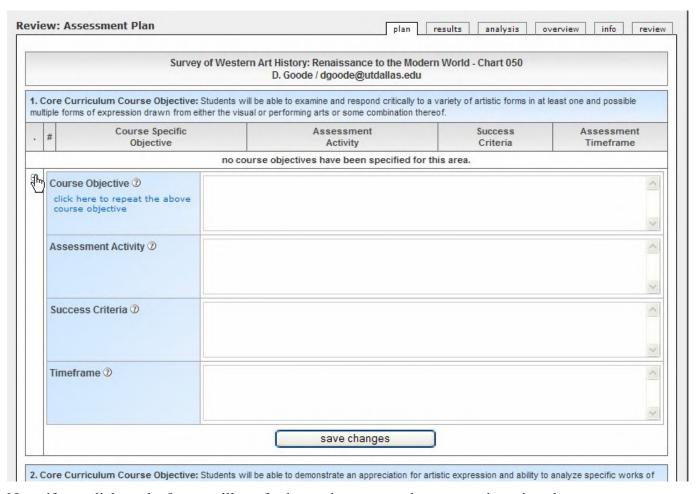
Key Guidelines:

In general, your plan must:
A) address all the (blue-line) Core Learning Objectives,
B) include at least two different assessment for each of the blue-line Core Objectives, and
C) **not use** the same assessment/score to evaluate more than one Objective. Thus, for example, if there are three blue-line Core Objectives, you need a total of (at least) 6 different assessments/scores to evaluate the three Core Objectives.

III. Brief Step-by-step Instructions

1. Go to http://sacs.utdallas.edu/assessment/ and log in using your NetID and email password.

2. Click on the **"my reports"** tab and then check on the "**2007 Spring**" button. Now click on the course number under "Section."

3. **IMPORTANT**: **Don't click on the "submit assessment plan" button on the "2. submit plan" tab** until you are completely done entering information. Once you click this buttons, you are unable to make changes in your plan.. If you prematurely click this button, please email Duane Buhrmester at buhrmest@utdallas.edu and he'll reset the system so you can make changes.

4. Click on the **"1. plan" tab**. This displays the section of the plan/report that you complete and submit for approval at the beginning of the semester. It should look similar to this:

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5. Click on the "+" on the far left under the first "1. Core Curriculum Course Objective." It should then look similar to this:
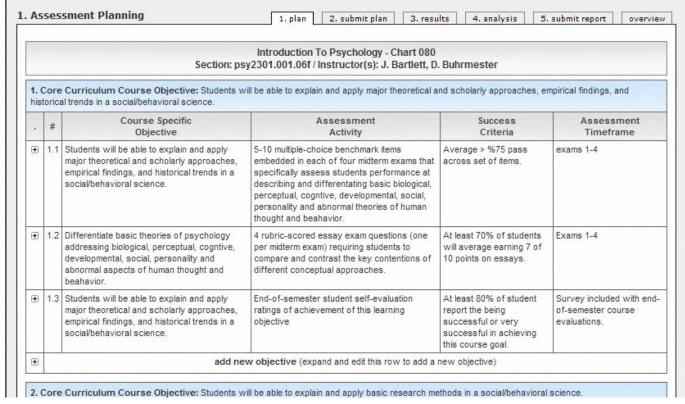

Note, if you click on the ?, you will see further assistance on what to enter in a given box.

6. In the text box to the right of **Course Objective**, type in a course learning objective that is consistent with, or is subsumed under, the first Core Curriculum Objective (here referred to as a "blue-line" objectives) that spans across the top of the window. You can either use a course-specific learning objective from your course syllabus or duplicate the general blue-line Core Objective (by copying and pasting in the blue-line text from above). More on selecting learning objectives.

7. Next enter one **Assessment Activity** that will be used to evaluate whether the course succeeds in meeting this Course Objective. Your description needs to be specific enough so that we can tell that it is different from the other assessments you describe in your plan. Remember, the guidelines dictate that the numerical results from one assessment activity can not be used to evaluate multiple Course Objectives (i.e., guideline C). A good example of specificity might be: "4-5 embedded multiple-choice items from each of the midterm and final exams that assess critical thinking about works of art." A (bad) example of insufficient specificity might be: "Exam 1 and Exam 3". More on selecting assessment activities.

8. In the **Success Criteria** window enter the number (or percentage) of students who must succeed at the Assessment Activity in order for you to conclude that the course has met the learning objective. Disciplines and courses differ in their success criteria. For example, some instructors consider the course successful in meeting an objective if 25% of the students pass the benchmark. Other instructors look for 90% success. More on choosing success criteria.

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9. Enter the **Timeframe** of when the Assessment Activity will take place. Be specific so that you will know when you must gather and record particular assessments. For example, "exam 1" or "paper due at the end of the semester.

10. Click on the "save changes" at the bottom of the window. You must do this to save what you have done so far.

11. Now, you must **enter at least one more row** of Objectives/Assessments/Criteria/Timeline for the first blue-line Core Curriculum Course Objective. To open another row in the table, click on the "+" next to where is says "**add new objective** (expand and edit this row to add a new objective)". This will open another window that looks like #6 above.

12. Repeat #7 to #10 above. Be sure that your description of this Assessment Activity makes it clear how the activity is different from the assessment activity you entered earlier.

13. Repeat #7 to #12 for each of the blue-line Core Objectives, entering at least two rows for each objective.   Remember, you must have assessments for **all the blue-line Objectives** listed in the Plan template.

14. Finally, click on the **"2. submit plan"** tab after you have entered and saved your plans for all of the blue-line Core Objectives. Click on the "submit assessment plan" button at the bottom. The CCC will review the plan and let you know if any adjustments need to be made.

15. Throughout the semester, make certain that you are using your plan as a blueprint for gathering your assessment data. Once the CCC approves your plan, you can begin to input your assessment items and findings in the 2. results and 3. analysis sections of the Assessment Tool. Your final assessment report will be due two weeks after the last day of final exams. More on gathering and reporting assessments.

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A. Selecting Learning Objectives.

1. **Learning objectives** specify the knowledge and skills that the course's curriculum and learning activities intend to foster in students. Learning outcomes should reflect clear, measurable student outcomes.

2. Each course approved to satisfy a component of UTD general-education Core Curriculum **must address all** the blue-line Core Curriculum Objectives. These required learning objectives are adapted from State of Texas Higher Education Coordinating Board objectives that are fine-tuned by the UTD Core Curriculum Committee (CCC). They are highlighted in blue on the online Assessment Tool. A Core course may have learning objectives beyond those required by the CCC.

3. Your assessment plan must contain at **least two (2) rows** of Objectives/Assessments for each CCC blue-line objective (the example below shows three rows). There are two ways to handle the learning objectives for these 2+ rows. If you have two or more course-specific learning objectives (as listed in our course syllabus) that conceptually address the CCC objective, then they can be listed one each per row. Alternatively, you can duplicate the general CCC objective for each of the rows. It is important to know that you might have many more objectives on your syllabus than reflected in this assessment of your class. That is fine and even expected. You can also mix these to methods as in the following example:

4. Best practices in assessment require that learning objectives must be stated in language that conforms to Bloom's hierarchy of types of learning. The CCC's objectives conform to Bloom's language. See the Assessment Workbook for how to phrase course-specific learning objectives: http://sacs.utdallas.edu/hotdox/assessment-workbook-2006-03-01.pdf (pages 20-21). Stating learning objectives with Bloom's verbs will allow you to assess them much more easily than using non-specific wording.

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B. Selecting Assessment Activities.

1. The goal of an assessment activity is to yield a quantitative evaluation of how well the course's curriculum and learning activities are achieving a specific learning objective. For example, if I have a course objective that students be able describe to Freud's conceptions of the id, ego and super ego, then I need to have a means of assessing how many students actually achieve this learning objective. The main criteria should be face validity: a colleague or SACS reviewer should be able to read the item and think, "Yep, that looks like a reasonable way to assess that learning objective." More on the logic of course assessment.

2. Each of the blue-line CCC Core Learning Objectives must be assessed by **two or more different types of assessment** activities (this guideline parallels A.3. above). Each type of assessment needs to be entered as **a separate row** in the table (e.g., 1.1 for one type of assessment and 1.2 for the second type of assessment).

    a. In the Assessment Activity window, specify the **type of assessment**, approximate **number of items**, and substantive **focus of the assessment**.

    b. Different **"types"** of assessment include, for example, multiple choice, true-false, fill-in, short answer, essay question, problem calculation, paper assignment, writing sample, class presentation, class discussion/participation, journal entries, or project report (this list is not exhaustive of the possibilities). Assessments need not contribute toward students' course grades (e.g., number of students speaking during class discussion as an indicator of student involvement, or samples of un-graded "three-minute writing exercises" that are evaluated for critical thinking.)

    c. If you don't gather different types of assessments in your course, another way to satisfy this guideline is to draw subtypes of items from one of the above categories. For example, if you only gather multiple choice assessments, then identify one subset of items that measures lower-level learning (i.e., define or describe) and another that measures higher-level learning (i.e., apply or reason).

    d. In terms of "**number of items**", it is better if assessments include multiple items where possible (e.g., it's better to use a set of 5 multiple choice items rather than just one multiple choice item); this increases the reliability and validity of the assessment. However, all the items in a set must have a similar su'stantive focus that address the specific learning objective. Thus, using a score from an entire exam is appropriate only if **all** the items in the exam specifically and narrowly assess the learning objective of interest.

    e. Description of the substantive "**focus of the assessment**" needs to be specific enough so that we can tell that it is different from the other assessments described in your plan. A good example of specificity might be: "4-5 embedded multiple-choice items from each of the midterm and final exams that focus on critical thinking comparing major psychology theories." A bad example of insufficient specificity might be: "Exam 1 and Exam 3".

3. Assessments must yield evaluative results that are **specific to a particular learning objective**, not to the entirety of the course. This is why course grades are not appropriate assessments; course grades are too global to tell us whether we are achieving specific learning objectives.

4. The same **assessment/score can not be used to evaluate multiple objectives**. For example, the overall grade from one exam can not be used to evaluate two learning objectives, one about substantive knowledge and the other about research methods. The reason being, with only one numeric result, it would be impossible to determine whether the course was succeeding at one objective but failing at the other. You can, however, use the same **type** of assessment to evaluate

multiple objectives. For example, it would be fine to use a subset of items from one exam to assess substantive knowledge while a separate subset of items from that exam is used to assess mastery of research methods.

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The logic of course evaluation is different from the logic of evaluating students (i.e., assigning student grades). Course evaluation answers the question ***"how well are the course's curriculum and learning activities doing at achieving the desired learning outcomes among students?"*** In contrast, student evaluation/grading answers the question ***"how well did a specific student achieve the desired learning outcomes?*** The focus of the former is evaluating the curriculum and learning activities, whereas the focus of the later is evaluating individual differences in student performance.

The confusing part is that these two types of "performance" are intertwined. One factor influencing student performance (in addition to individual capability and effort) is the effectiveness of the courses curriculum and learning activities. An important way to ascertain course "performance" depends on evaluating the proportion of students for whom the course succeeded in fostering the desired learning outcomes. If a low proportion of students achieved a learning objective, it could have been due to several factors: a) the course's learning activities were not appropriate to produce the desired outcomes; b) the learning objectives were unreasonably high; c) the students, taken as a group, were not capable of, or prepared to, benefit from the learning activities, or d) the students, taken as a group, were not exerting the effort needed to benefit from the courses learning activities. Deciding which factors, or combination of factors, are responsible for failing to achieve learning objectives involves ruling out, through empirical or logical analyses, alternative possibilities. For example, if I know my students as a group are bright and hard working (perhaps based on high school grades, SAT's, performance in other college courses, and amount of time/effort devoted to studying for the class) then I can narrow the problem down to the learning activities, the learning objectives and/or the background preparation of the students as a group.

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C. Selecting Success Criteria.

1. Conceptually, the **Criterion of Success** stipulates a) a **threshold** of success and b) the proportion **of students** who must surpass the threshold in order to conclude that the course has met the learning objective. For example, on an essay question, earning 7 of 10 possible points might be the threshold I think achieves the desired learning outcome. My numerical result would then be the number/percentage of students who surpassed this threshold.

2. Please **DO NOT USE COURSE LETTER GRADES** as success criteria. SACS does not view **course grades** as valid assessments of specific learning objectives. SACS (rightly) sees course grades as a measure of students' overall performance, not as measures of specific course outcomes. The goal of the SACS assessment is to measure how well our courses are performing at meeting our specific objectives. Therefore, we should evaluate the success of the course in terms of the percent of students who achieve specific objectives. You can, however, use letter grades on specific assignments/exams as "numeric results," provided that the entire assignment/exam speaks discriminatively to one specific learning objective. For example, if you give a letter grade for writing assignment that specifically (and narrowly) assesses critical thinking (which is a specific course objective), then it is permissible to state the success criteria as "70% of the students will earn a grade of B or better based on scoring criteria/rubric which evaluates the sophistication of critical thinking."

3. *How high or low you should set your threshold of success?* There is no definitive/prescribed answer, but we suggest that you set the percent of students between 70-80% and that you select assessment items that have a difficulty/challenge level (i.e., the percent of students who will pass the item) between 70-80%. Our reasoning for this recommendation is that if these assessments are to provide useful information that we can use to improve our courses, the assessments need to provide diagnostic scores. Selecting "easy" item (e.g., 90% difficulty) and a low-ish thresholds (e.g., 60% achieve) will yield rosy evaluations (i.e., 98% of students achieved objective) but give us no insight into how to improve the course. In addition, what SACS most wants to see is a meaningful *assessment cycle* in which we a) identify areas that need to be improved, b) implement changes, and c) make assessments again to see if the changes worked. We can't have a cycle of improvement unless we identify limitations.

4. Here is one **logic for establishing a criterion for success**. It is based on the assumption that the number of students achieving a learning outcome is a joint additive function of student factors (capability and conscientiousness) and course factors (learning activities and level of objectives). Let's say I have a learning objective that I believe 100% of students who are capable and conscientious should achieve. I would set my success criteria at 100% were it not for the fact that less that 100% of the students in the course are truly "capable and conscientious." If I estimate that perhaps 25% of the students are not "capable and conscientious," then I would logically down-grade my success criteria to 75%. In so doing I am asserting that I will deem that the course learning activities were successful if 75% of the students achieved the learning objective. The success criterion moves up or down depending on my beliefs and assumptions. For example, if I believe a higher-level learning objective is within the grasp of only 50% of capable and conscientious student, and I assume that 75% of my students are capable and conscientious, then I would set my success criteria at 37.5%. While the process of setting success criteria is not arbitrary, it is relative to the beliefs and assumption you make.

5. Different types and numbers of assessment items require **different success criteria**. Here are possible ways to handle different types of assessments.
   a. **Single-item measures**. This can be a single multiple-choice item, an essay item, a problem solution, final project, performance, team project, or a term paper. Please be aware that a single

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item on an exam is not the best way to measure an outcome. Multi-item measures provide more reliable and valid assessments of what students have actually learned.

  i. ***Dichotomous outcome***: Report % students passing. For example, the percentage of students in class correctly answering a multiple-choice item or a true/false item.
  ii. ***Multi-point outcome*** *(e.g., number of points earned out of 10 possible for an essay questions)*: Set a cut point (e.g., 7/10 points) for "passing" and then report % students surpassing that cut point. To do this, record points for all students, count number of students surpassing the cut point, and divide by the total number of students.

b. **Multi-item measures**. These can be a set of multiple-choice items, a set of essay items, or multiple scores from one assignment (e.g., a term paper).

  i. ***Homogenous types of items (e.g., all multiple-choice items)***. Report the "Average rate of passing across the set of items" (e.g., Average > %75 pass across the set of items). This is often described as the average item difficulty. It is computed by averaging within a set of items the percent of students passing each item (e.g., [% pass item1 + % pass item2 + % pass item3] divided by 3). This information can be taken directly from the Scantron Item Analysis report. This method is easer to compute than "75% of student score above 75%" which requires that you count for each student the number of items s/he passed and then compute the percent of students who passed at least 75% of the items in the set.
  ii. ***Mixed types of items (e.g., mix of dichotomous and multi-point items).*** Report a composite success rate that is the average of the rates for each type of assessment. For example, if you had a 5-item multiple choice "average rate of passing" of 80% and had a one-item essay of 70% of students earning 25/30 points or more, then the composite success rate would be 75% (i.e., [70% + 80%]/2). You could give more weight to one type of measure in the composite if appropriate.

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D. Gathering and Reporting Assessments

1. You should **plan ahead** to make your tasks of gathering, recording, computing, and reporting course assessments as painless as possible. The over-arching message is that a few minutes of planning at the outset of your course could save you many hours of work later on. Also, it will be impossible to archive samples of student work if you turned back the exams, paper, etc. to students without making copies.

2. **Devise a system of recording specific scores throughout the semester.** Here are some suggestions about how to record assessment scores.
   a. **Multiple Choice and True-False Items.** If you use scantron-like answer sheets, ask for the "item analysis report" during the machine scoring. It will provide percent/number of students passing each question. If you hand score multiple choice items, then create a hand tally sheet on which you record correct/incorrect hash marks as you score each exam item that feeds into your assessment. This will save the time of having to flip back through individual exams later to find and record the number of students getting the item correct.
   b. **Essay and Problem Solution Questions.** These are questions that you or your TA hand score using scoring criteria/rubric. Record scores separately in your grade book for each question that is used in the course assessment. Otherwise, you later need to go back through individual exams to pull these scores out.
   c. **Sub-parts of Papers.** Let's say that you plan to assess critical thinking that is evident in student term papers. Since the critical thinking score will probably be one of several scoring components in you paper-grading rubric, you will want to record the critical thinking score separately from the overall paper scores.

3. **Saving assessments.** You will be asked to include in your final report the actual items (i.e., questions, problems, instructions, scoring criteria/rubric, etc.) you used in your assessments. You will electronically paste these items into a window under the "3. results" tab of the Assessment Tool (see the example at INSERT URL). To simplify this task, you may want to accumulate these items in a text file throughout the semester. At a minimum, be sure to keep electronic copies of all tests, assignments, etc. you give during the semester.

4. **Keeping samples of student work.** We've adopted what we hope is a minimalist approach to archiving samples of students work. You should keep these samples secure in a file folder in your office. You may be asked to present these samples should a SACS visitor audit your course assessments.
   a. **Multiple choice or true-false items.** There is no need to keep copies of student tests or answer sheets.
   b. **Essay and problem solution answers.** Save three samples of student answers representative of three levels of mastery: exemplary, adequate, and not-meeting-the-criteria level. These can be photo copies with student identifiers removed
   c. **Papers and projects**. Save 3 samples of student answers representative of three levels of mastery: exemplary, adequate, and not-meeting-the-criteria level. These can be photo copies with student identifiers removed.
   d. **Oral presentations**. Save 3 samples of student score sheet rubrics representative of three levels of mastery: exemplary, adequate, and not-meeting-the-criteria level. It is not necessary to record students' presentations