DIVISION OF ACADEMIC AFFAIRS

GENERAL EDUCATION COUNCIL
CORE CURRICULUM ASSESSMENT GUIDELINES

The following information will assist instructors to complete the Valdosta State University Core Curriculum Assessment Plan. The plan has been designed to be completed as ordered in this document.

Section A: Course Information

Input the following information into Section A of the plan:

1. Department:
2. Course(s) to be assessed:
3. The term (semester and year) of assessment:

Section B: Learning Outcome(s)

Input the outcome for the specific course. The seven specifically targeted learning goals (i.e. Core Curriculum Outcomes) come from specific areas of the IMPACTS Core Curriculum.

Institutional Priority (4 hours)
Learning Outcome: Students will demonstrate the ability to think critically and solve problems related to academic priorities at their institution.

Mathematics and Quantitative Skills (3 hours)
Learning Outcome: Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.

Political Science and History (Citizenship) (6 hours)
Learning Outcome: Students will demonstrate knowledge of the history of the United States, the history of Georgia, and the provisions and principles of the United States Constitution and the Constitution of Georgia.

Arts, Humanities, and Ethics (6 hours)
Learning Outcome: Students will effectively analyze and interpret the meaning, cultural significance, and ethical implications of literary/philosophical texts or of works in the visual/performing arts.

Communicating in Writing (6 hours)
Learning Outcomes: Students will communicate effectively in writing, demonstrating clear organization and structure, using appropriate grammar and writing conventions.
Students will appropriately acknowledge the use of materials from original sources.

Technology, Mathematics, and Sciences (11 hours)
Learning Outcome: Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.

Social Sciences (6 hours)
Learning Outcome: Students will effectively analyze the complexity of human behavior, and how historical, economic, political, social, or geographic relationships develop, persist, or change.

Section C: Knowledge & Skills Assessed

Identify the course specific knowledge & skills to be assessed as related to the Core Curriculum Outcome(s) identified in Section B. Each specific knowledge or skill should be enumerated separately, similar to how specific course objectives are enumerated in a course syllabus. The purpose of this section is to take the specific Core Curriculum Outcome and break it down into clearly defined knowledge and/or skills that reflect the nature of the particular course. Courses will likely contribute to achieving the same Core Curriculum Outcome in varying ways. It is up to the instructor, the nature of the course and the department to establish the relationship between the Core Curriculum Outcome and the specific knowledge & skills. Additionally, in some cases, discipline specific terminology as related to the knowledge and skills will need to be defined. As the Core Curriculum Assessment Plans will be reviewed by individuals from various departments, it is important that information is clearly conveyed.

Example 1: Identification of Knowledge / Skills

In some cases, identifying specific skills is relatively easy. The core curriculum outcome for Mathematics and Quantitative Skills states: “Students will apply mathematical and computational knowledge to interpret, evaluate, and communicate quantitative information using verbal, numerical, graphical, or symbolic forms.” For courses charged with assessing student performance in this area, determining the specific functions and equations and the appropriate format (mathematical problem, word problem, graphing, etc.) is relatively simple.

In other cases, selecting appropriate knowledge and skills to assess will require more decisions. The core curriculum outcome for Technology, Mathematics, and Science states “Students will use the scientific method and laboratory procedures or mathematical and computational methods to analyze data, solve problems, and explain natural phenomena.” Each department must separately identify a set of facts, principles, methods, and concepts that would indicate an “understanding” of the physical universe from its disciplinary perspective.

Section C Guiding Questions:

1. What specific knowledge/ skills are required to meet the Core Curriculum Outcome indicated in section B? What has been included in the course objectives of the course syllabus as related to the Core Curriculum Outcome?
2. What facts, terms, theories, concepts, chronologies, hypotheses, methods, schemata, etc., constitute the knowledge to be assessed?
3. What activities, behaviors, demonstrations etc., constitute the skills to be assessed?
4. What discipline specific terminology should be identified and defined?

Section D: Level of Knowledge & Skill

Evaluate each knowledge & skill objective identified in Section C in light of Bloom's Taxonomy (Bloom, Englehart, Furst, Hill, & Krathwohl, 1956).

Identify the levels (low, higher, highest) for each objective. In this section, the instructor is essentially matching the above (Section C) knowledge or skill to the language associated with a specified level of Bloom's taxonomy. Be mindful that the level of knowledge discussed in this section will have a direct bearing on the type of assessment activity (section G). If the level identified in Bloom's taxonomy does not reflect the level desired by the instructor/department, it may be appropriate to modify the language describing the knowledge or skill to more accurately reflect the desired depth.

Not all knowledge & skills are equal. Some knowledge & skills require a "shallow" level of processing (e.g. recognize terms, recalling facts) while other knowledge & skills require 'deeper" cognitive processing (e.g. analyzing an argument or constructing a hypothesis). Depending on the nature of the course, the level of depth of processing may vary. Bloom's taxonomy is one common way of categorizing depth of processing, in which depth is broken down into three general domains. The lowest level (shallow) consists of the ability to remember, recognize, and repeat terms and ideas. Higher levels involve the ability to explain, give examples, apply, and otherwise use knowledge. The highest levels (deep) involve the ability to assess, critique, and evaluate. At this level, knowledge and skill blend into a single complex unit and are no longer easily distinguishable.

Some verbs that commonly appear in descriptions of knowledge at various levels can be found below. For a fuller discussion of Bloom's original taxonomy as well as a more recent revision of it, see https://www.celt.iastate.edu/instructional-strategies/effective-teaching-practices/revised-blooms-taxonomy/

Lower Level	***Higher Level***	***Highest Level***
Recognize	Infer	Analyze
Identify	Explain	Critique

List	Paraphrase	Justify
State	Illustrate	Create
Match	Apply	Develop

Examples:

*The following knowledge/skill outcome reflects a **lower level** of processing:*

- *Students will recognize the conventions of grammar, punctuation, and word choice used in academic and professional context.*

*The following knowledge/skill outcome reflects a **higher level** of processing:*

- *Students will **apply** in written discourse the conventions of grammar, punctuation, and word choice used in academic and professional context.*

Section D Guiding Questions:

1. What words within Bloom's taxonomy (see above) identify the desired depth of knowledge & skills?
2. What justification might be provided for the level of depth provided as related to the Core Curriculum Outcome?
3. Why might one level be more desirable than another level given the course content?

Section E: General Instructional Strategies

Identify the general instructional strategies that can be used by faculty teaching the specific course to assist students in mastering outcomes identified in Section B. Each strategy listed must be vetted by the department. Each strategy should be enumerated separately. Additionally, define any discipline-specific language.

Section F: Linking Instructional Strategies to Outcomes

Describe the instructional strategies that will be used to assist students in mastering the Learning Outcomes identified in Section B as it relates to the general instructional strategies identified in Section E. Specifically address the connectivity between the specific instructional strategies and individual learning outcomes. This section is to be completed in two parts: 1) table, and 2) narrative providing a full discussion of the connection between the paired instructional strategies and learning outcomes.

Section G: Assessment Activity Description

Describe the assessment activity that will be used to measure how well students have mastered the Core Curriculum Outcome identified in Section B as it relates to the course specific knowledge and skills identified in Section C.

Attach sample questions and/or activities.

In selecting an appropriate assessment activity, carefully consider the following:

1. Appropriate student response format.

In selecting an appropriate stimuli and response format for an assessment activity, it is important to consider the depth and breadth of the knowledge and skill to be assessed, whether to use open versus closed response questions, and the appropriateness of performance based assessment.

Depth and breadth of knowledge/skill

When determining assessment methods, it is important to consider the knowledge and skills of interest, as well as the cognitive level(s) of the task specified (e.g., Bloom's taxonomy). A poorly selected assessment method may results in a disconnect between learning objectives and the assessment (Osborne & Wagor, 2004).

While there are various ways to assess knowledge and skills, all are not equal in their ability to measure the depth and breadth of student learning.

- Some methods of assessment lend themselves better to assessing *lower levels* of cognitive understanding/proficiency by asking students to identify or recognize information (e.g., multiple choice, matching).

- Other methods of assessment are more appropriate for assessing *higher levels* of understanding by asking students to explain and analyze information or develop a product (e.g., short answer, essay, role play).

It may be possible to use multiple choice questions to assess higher order thinking, but the questions must be written in a way that reflects higher order thinking processes (Osborne & Wagor, 2004). To interpret a student's performance as reflecting higher order thinking skills, the assessment questions should be written in such a way that students use higher order thinking processes to complete the assessment (Nitko & Brookhart, 2004).

Open vs. closed response formats

Measurement questions take many forms. Consideration should be given to whether certain kinds of knowledge or skills lend themselves to objective closed response questions or more open ended questions.

- Closed response formats have objective "correct" solutions (e.g., True/false, multiple choice, fill in the blank). Measurement of specific knowledge or very discrete skills lends itself easily to objective questions. This question response format requires students to recall and recognize information (Sternberg, 2004).

  Example: The person associated with developing a cognitive theory of depression based on negative and maladaptive thinking was:

  A. Beck
  B. Freud
  C. Seligman
  D. Lewinsohn

- Open response formats are more subjective and require detailed grading rubrics (e.g., Short answer and essays). Measurement of a student's ability to analyze, compare and contrast, evaluate, explain, and critique various knowledge or skills may lend itself better to an open versus closed response format (Sternberg, 2004).

  Example: Analyze the strengths and weaknesses of Skinner's account of language development (Sternberg, 2004, p. 115-116).

Performance-based assessment

Performance-based assessment provides a direct measure of what students know and can do as the result of educational experiences using an open response format (Bosack, McCarthy, Halonen & Clay, 2004; Resnick & Resnick, 1996). Performance assessment promotes higher order thinking and requires students to demonstrate their knowledge or skills creating a product (Rudner & Boston, 1994). Performance based assessment may be particularly relevant in courses related to the arts, communication or foreign language.

- Practical mastery of skills and evidence of the ability to apply, implement, and employ what they have learned may require an open response written demonstration (Sternberg, 2004).

  Example: Apply Janis's theory of groupthink to explain why leaders of political parties sometimes put forward candidates to run for office who, because of their extreme views, have little chance of winning (Sternberg, 2004, p. 117-118).

- Alternatives to multiple-choice tests may be to have students demonstrate their abilities by conducting research and writing a report, developing a character analysis, conducting a debate, or dramatization/role play.

2. Efficient use of class time.

Consideration should also be given as to whether assessments should include in-class activities or out-of-class assignments.

- Classroom assessment techniques are targeted questioning techniques that help instructors and students determine if learning goals are being met. This may include classroom quizzes or exams or various other assessment techniques.
    - A comprehensive study of classroom assessment techniques appears in the book, *Classroom Assessment Techniques: A Handbook for College Teachers*, by Thomas A. Angelo and K. Patricia Cross (San Francisco: Jossey-Bass, 1993 [Second Edition]).
    - Example techniques provided by Central Michigan University are available at https://www.cmu.edu/teaching/assessment/assesslearning/CATs.html

- Out of class assignments may include a formal class presentation, a research exercise, a short response or reaction paper, a documented research paper, or any other regularly scheduled activities designed to assess student's ability to synthesize knowledge or demonstrate mastery of essential skills.

3. Ease of administration.

In choosing an assessment activity, one would be remiss to neglect practical considerations. What is the average class size for your courses? What kind of assignments do these courses typically use? If an assessment activity takes considerable time and effort to administer and score, it will likely be perceived by instructors as burdensome. Therefore, the assessments you select should meet the following criteria:

- They are *sustainable*. That is, they do not require heroic expenditures of students' or professors' time either to take or to assess. Effective activities are ones that will give your department enough information to make constructive changes in the course requirements while requiring the least amount of time and effort. In large sections, that might mean giving a machine-graded test to assess a key outcome for all students. It may also mean selecting a sample of students from the larger section so that individual work samples may be qualitatively assessed.

- They are *unobtrusive.* Assessment activities should fit naturally into the course and do not interrupt the normal flow of activities. Ideally, they are part of the current schedule of course assignments.

- They are *typical*. If instructors who teach the course are not already using the activity, then they can easily incorporate it into their syllabus.

4. Long-term logistical issues.

Since General Education assessment will be on-going, assessment activities should yield information that is easy to store, easy to retrieve, and easy to assess (by the instructor as well as by a separate departmental assessment committee).

5. Reliability and validity.

The two most important indicators of assessment information quality are reliability and validity (Brookhart, 2004). **Reliability** refers to the extent to which assessments are consistent. Reliable assessment results remain consistent over time and when two instructors evaluate performance on the same task (Nitko & Brookhart, 2011). Below are some considerations for improving the reliability of assessment results:

Objective Assessments

- Student performance should be consistent from item to item and tests should have enough items (sufficiency of information) so that the consistency is evident (Nitko & Brookhart, 2011). Provide several opportunities for students to demonstrate competence for each learning target assessed. By asking several questions about the same course objective, a pattern of student achievement will emerge (Nitko & Brookhart, 2011).

- When considering the number of items to include on the assessment, ask yourself “Can I say with confidence that student performance on these test items (whether right or wrong) accurately represents what he or she can do?” As a general rule of thumb, aim for at least five items on any one topic before you place too much confidence in conclusions (Brookhart, 2004). In general, as the number of assessment items increase, the reliability of the measure increases.

Subjective Assessments

- For *subjectively* scored work, the major reliability concern is accuracy of judgment (Brookhart, 2004; Nitko & Brookhart, 2001). While ensuring inter-rater reliability by double scoring with colleague may not be feasible, there are ways to make your judgments more accurate. For example:

    - Have clear criteria written out ahead of time and share the criteria with students through clear directions.

- Use systematic scoring procedures such as rubrics, scoring guides, or exemplar papers or projects for each level of grading (Brookhart, 2004; Nitko & Brookhart, 2011).

Validity refers to the extent a test's content represents the knowledge and skills being learned as well as the soundness of your interpretations and uses of student's assessment results (Nitko & Brookhart, 2011). Below are several considerations for improving the validity of assessment results:

- Assessment information should be directly related to course objectives. Assessment should match the identified knowledge and skill domains, represent the depth and breadth of knowledge required, and reflect the cognitive level of the task (recall or higher-order thinking) (Brookhart, 2004; Nitko & Brookhart, 2011).

- Assessments should contain tasks that may be interpreted appropriately by students from diverse backgrounds and accommodate for students with disabilities as appropriate (Nitko & Brookhart, 2011).

- Consider multiple assessment methods, rather than a single assessment activity to discover whether students have demonstrated the full range of your expectations (Osborne & Wagor, 2004).

Section G Guiding Questions (Brookhart, 2004; Serban, 2004):

1. What information do I need to assess each learning objective?
2. What would be the best (and most practical) way to get this information? [To answer this question, think through your assessment options.]
3. Would student performance on this assessment really indicate the particular kind of achievement I need to know about?
4. Will I have enough information about each student to be sure about my conclusions? [If the answer is no to either of the above, adjust before you continue.]
5. Is the information I get from this assessment useful for its designed purpose?
6. Is the assessment realistic and prudent?
7. Does the assessment conform to legal and ethical standards?

Section G of the Core Curriculum Assessment Plan asks all instructors to respond to the following questions regarding validity and reliability.

1. Specifically describe the safeguards implemented to ensure reliability of assessment results.

2. Specifically describe the safeguards implemented to ensure validity of assessment results.

Section H: Assessment of Individual Student Proficiency

Describe how individual student performance on the assessment activities outlined in Section G will be evaluated.

Attach scoring guidelines and rubrics.

Define student proficiency as it relates to the assessment activity and evaluation criteria identified above. Proficiency of individual student performance will be described here (Section H). Aggregate student performance will be described in next section (Section I).

In defining individual student proficiency, you should develop three proficiency levels: (3) Exceeds Expectations, (2) Meets Expectations, (1) Fails to Meet Expectations. Each level should be defined as specifically as possible so that all instructors who teach the course may apply these same standards with equivalent results. Definitions of proficiency levels may vary by course, assessment activity, and method of evaluation. Consider the following examples in developing statements of individual student proficiency.

Example 1: Assessing student knowledge and skill of a learning objective (e.g., political, economic, and social developments of the late 1800s that led to the USA emerging as a world power) with embedded multiple choice questions:

Exceeds Expectation:

- Student correctly answers 90-100 percent of multiple choice items.

Meets Expectation:

- Student correctly answers 70-89 percent of associated multiple choice items.

Fails to Meet Expectation:

- Student correctly answers 69 percent or less of associated multiple choice items.

Example 2: Assessing student knowledge and skill (i.e., the use of sources) in a documented essay:

Exceeds Expectation:

- Sources are varied, appropriate to the topic/purpose, and offer substantive support or illustration.

- Paraphrases are completely accurate, inferences are insightful, and both are seamlessly integrated into the essay.

Meets Expectation:

- Sources are somewhat varied, mostly appropriate to the topic/purpose, and offer support or illustration.
- Paraphrases are generally accurate, inferences are plausible, and both are properly attributed.

Fails to Meet Expectation:

- Sources are not sufficiently varied, inappropriate to the topic/purpose, or do not offer support or illustration.
- Paraphrases may significantly distort a source; inferences may be unwarranted; sources may not be attributed, or they may be improperly attributed.

Section H Guiding Questions:

1. To what extent is the assessment objective, subjective, or a combination of the two and how does this impact the creation of and use of a scoring guide or rubric?
2. Given the nature of the assessment, what criteria would determine, exceeds, meets, or fails to meet expectations?

Section I: Assessment of Aggregate Student Performance

Define a criterion for aggregate student performance by identifying the percentage of students in the course(s) that are expected to fall within the three proficiency levels: (3) Exceeds Expectations, (2) Meets Expectations, (1) Fails to Meet Expectations.

In determining the criterion for aggregate student performance, consider internal and external policies or procedures that may have bearing on the criterion. Additionally, involve all appropriate faculty and administration. The criterion set for aggregate student performance is important because it may serve as the standard for determining whether the assessed level of student learning is acceptable or if changes need to be made.

Example:

Exceeds Expectation:

- 25 percent of students will exceed expectation.

Meets Expectation:

- 50 percent of students will meet expectation.

Fails to Meet Expectation:

- 25 percent of students will fail to meet expectation.

Section I Guiding Questions:

1. What is the basis for criterion expectation (e.g. departmental standards, university standards) of student performance?
2. What is the criterion expectation for aggregate student performance?
3. Was the criterion for aggregate student performance met?

Section J: Assessment Implementation

Construct a plan to implement the assessment. This process is multifaceted and involves several key decisions.

The mechanics of assessment administration will vary depending on the number of students being assessed, the frequency of assessment, the type of assessment activity, and method of evaluation selected. Consider the following examples and guiding questions.

> *Example 1:* When using a series of objective questions on a machine-graded exam to measure student learning, then you will likely tabulate and use all of your responses.
>
> *Example 2*: When using subjective class presentations, essays, or similar activities to measure student learning, then you may need to assess representative samples of students.

If using sampling, instructors will need to complete the Request to use Statistical Sampling in Core Curriculum Assessment form. Click on the following link (http://www.valdosta.edu/gec/) then click on “Request to use Statistical Sampling”. A Microsoft Word document will be downloaded for instructors to complete and submit to the General Education Council for approval.

To facilitate implementation planning, consider the following questions:

1. How many sections will be assessed?
2. How many students will be assessed?
3. If sampling is being conducted, are you sampling by section or by student?
4. If sampling, how many students / sections are statistically “representative”?
5. What principle will be used to select samples?
6. When using subjective assessments, who will assess the work samples?
7. When using objective assessments, how will responses to the specific questions be isolated and collected?
8. How often will assessment occur? Will the assessment be conducted only once (e.g. as part of the final exam) or will assessment be reoccurring (e.g. as embedded test questions)?

Section K: Review & Analysis of Findings

Develop a plan to review and analyze findings. Whether you use objective questions or representative work samples, the work needs to be reviewed and analyzed by a group of departmental members in light of the criterion for aggregate student performance (Section I).

Section K Guiding Questions:

1. Where and how will these samples be stored until they are evaluated?
2. Who will collect, collate, tabulate the results?
3. Who will review and evaluate the assessment data with consideration of the student performance criterion?
4. When will the review and evaluation of assessment data occur (e.g. during vs. end of term)?
5. Who will be responsible (e.g. individuals, Assessment Committee) for determining that aggregate student performance met the criterion proficiency?

Section L: Dissemination of Findings

Describe a dissemination plan for the assessment findings. To increase the utility of assessment results, one must consider the specific interest(s) of those who will be using the data (Serban, 2004). Comprehensive assessments will provide information that may be utilized internally (e.g., instructors, students, assessment committees, administrators) and externally (e.g., regional or professional accreditation committees) (Aloi, Gardner, & Lusher, 2003).

Section L Guiding Questions:

1. What internal (e.g., department, General Education Council) and external groups (e.g., accreditation) will review your findings?
2. Who will be responsible for reporting the findings to interested groups?

Section M: Preparation for Assessment Report & Use of Findings

Develop a plan to ensure that assessment findings may easily translate into the General Education Council Assessment Report. The Assessment Report document may be accessed through the following link (http://www.valdosta.edu/administration/university-assessment-committee/program-review.php). Preview this document to assist in this stage of planning. Check with the General Education Council for Assessment Report submission deadlines.

Describe how the assessment findings may be used for curriculum enhancement. To develop a comprehensive plan for improvement, it may be important to use data obtained from direct assessment (e.g., exams, projects, portfolios) and indirect assessment (e.g., surveys, interviews, focus groups) of student learning (Palomba & Banta, 1999). It is common for instructors to implement direct assessment techniques in measuring student outcomes. However, implementing multiple assessment methods may yield richer information about the curriculum, instructional approaches, and student learning outcomes, thus facilitating curriculum improvement decisions.

Our responsibility as educators goes beyond simply reporting assessment information. “Our deeper obligation-to ourselves, our students, and society-is to improve.” (Principle 9, AAHE, 1992). Therefore, once data is reviewed and analyzed, it is important to determine what changes should be made if students do not demonstrate the knowledge or skills at the desired level of proficiency. If the assessment data suggests that students are achieving, the decision may be to continue doing what one is doing. If students aren’t achieving, what changes should be made? (Osborne & Wagor, 2004).

Section M Guiding Questions:

- Who will prepare the Final Report?
- How will the collected data be used in the Final Report?
- What influential factors (e.g., course curriculum, teaching methods, student motivation, etc.) will be evaluated in light of the results?
- What changes (if any) may need to be made if students do not demonstrate the knowledge and skills for an objective at the articulated proficiency level?

Submission. Before the start of the term in which the assessment will occur, the department head should email the completed plan to the Chair of the General Education Council at assessment [at] valdosta.edu.

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