Overview of Academic Assessment Cycle

Academic Program and Core Course Assessment
Academic Assessment Leaders

- Michelle Cawthorn
  - Biology
  - College of Science and Mathematics
- Joe Pellegrino
  - Literature and Philosophy
  - College of Liberal Arts and Social Sciences
- Jeff Tysinger
  - Leadership, Technology, and Human Development
  - College of Education
Academic Assessment Steering Committee

- COBA
  - Timothy Cairney
  - Leslie Fletcher
  - Paul Metrejean
- COE
  - Elizabeth Edwards
  - Jeffery Tysinger
- CEIT
  - Rami Haddad
  - Aniruddha Mitra
- CHHS
  - Amy Jo Riggs
  - Kathy Thornton
- CLASS
  - Cary Christian
  - Helena Hernandez
  - Elsie Hill
  - Richard Mason
  - Joseph Pellegrino
- COPH
  - Helen Bland
  - Ashley Walker
- COSM
  - Allison Amonette
  - Michelle Cawthorn
  - Jiehua Zhu
General Education Coordinator

- Jack Borders
  - Office of Institutional Effectiveness
General Education & Core Curriculum Committee

- COBA
  - Jake Simons
  - William Amponsah
- COE
  - Bodur Yasar
  - Julie Garlen
- CEIT
  - Rocio Alba-Flores
  - Clint Martin
- CHHS
  - Ellen Hamilton
  - Amy Jo Riggs-Deckard
- CLASS
  - Rob Pirro
  - Sarah Bielski
- COPH
  - JingJing Yin
  - Isaac Fung
- COSM
  - Jim LoBue
  - Michelle Cawthorn
Academic Assessment

- An integral part of curricular and instructional development and improvement process
- A process used to determine if students are reaching our expectations of student learning outcomes and to maximize student learning at the
  - Institution (General Education) level
  - Program level
  - Course level
Fundamentals of Assessment at Georgia Southern University

- Assessment must be driven by faculty.
- Assessment is not faculty evaluation.
- Assessment is an integral part of curricular design and instructional development and improvement.
- Assessment Process should provide meaningful information about student learning for programs and individual faculty members; therefore, it
  - should not be undertaken solely to satisfy an administrative or accreditation mandate.
Assessment Cycle

Mission
Primary purpose of the unit, whom the program serves, the standards to which it aspires, and the program’s connection to the broader institutional mission

Student Learning Outcomes
Select or develop measurable student learning outcomes

Teaching Strategies
Identify classes, instructional strategies, and assignments to foster outcomes

Action Plans
Make adjustments in curriculum and instructional strategies to address weaknesses and strengths

Findings and Analysis
Analyze assessment results

Measure Outcomes
Select or develop measures that are capable of providing information for assessment purposes

Data Collection
Measure student learning outcomes
Mission

- Statement is directly related to the academic program (not the department).
- Statement addresses the purpose, primary activities, whom the program serves, as well as the standards to which it aspires.
- Statement is aligned with specific elements of the institutional mission along with the standards of an external professional organization, if applicable.
Student Learning Outcome

- Outcome is clear about who should be assessed & at what point in the student’s progression through the program.
- Outcome contains a precise action verb which identifies the explicit & observable behavior to be demonstrated.
- Outcome contains a learning statement that specifies the object of the behavior to be demonstrated.
- Outcome contains an achievement level which reflects an appropriate depth of knowledge.
- Outcome specifies discipline-specific criteria for evaluating the object of the behavior to be demonstrated.
- Outcome may be measured by more than one method.
Structure of SLO Statement

As a result of participating in (condition), Students will be able to (action verb) (defined by explicit and observable behavior) (according to criterion).
Institutional Hierarchy of Student Learning Outcomes

- Institutional SLOs
- Program SLOs
- Course SLOs
General Education Outcomes

Georgia Southern University has identified the following general education outcomes which it seeks to instill in all its graduates. The outcomes include additional text that serves to reflect overall curricular and extra-curricular efforts and not represent prescriptive expectations.

1. CRITICAL ANALYSIS AND SYNTHESIS OF INFORMATION
   Students are able to critically analyze and synthesize information before taking a position or drawing a conclusion.

2. EFFECTIVE COMMUNICATION
   Students are able to demonstrate competence in communication through various genres using language, conventions, organization, supporting evidence, and content appropriate to the purpose and audience.

3. ETHICAL AND INFORMED DECISION MAKING
   Students are able to consider alternate points of view that contribute to ethical conduct.

4. HISTORICAL AND CULTURAL PERSPECTIVES
   Students are able to analyze artifacts, events, concepts or themes within the context of an evolving and diverse human experience.

5. PROBLEM-SOLVING ABILITY
   Students are able to identify problems, evaluate their potential for resolution, and implement a strategy to address real-world situations.

6. QUALITY OF LIFE
   Students participate in intellectual and physical activities that contribute to lifelong learning and wellness.

7. RESPONSIBLE CITIZENSHIP
   Students apply cognitive, affective, or behavioral skills sets to support civil and informed interactions in a variety of cultural contexts.

8. SCIENTIFIC AND QUANTITATIVE REASONING
   Students are able to demonstrate, as appropriate, either scientific methods of inquiry or quantitative reasoning to explain, discover, or predict phenomena.

9. INFORMATION LITERACY
   Students are able to access, evaluate, and use information effectively and ethically to accomplish a specific purpose.
Core Curriculum Outcomes

Area A1—Communication Skills (at least 6 hours)

Students will demonstrate written competence in adapting communication to specific purposes and audiences.

Area A2—Quantitative Skills (at least 3 hours)

Students will represent, manipulate, and apply mathematical knowledge using analytical, graphical, and numerical approaches.

Area B—Institutional Options (at least 3 hours) Global Engagement

Students will identify major themes across diverse societies in their historical and cultural contexts and will apply this knowledge through engagement in local and global communities.

Area C—Humanities, Fine Arts, and Ethics (at least 6 hours)

Students will analyze historical and contemporary fine arts or other cultural products from individual and diverse social perspectives.

Area D—Natural Sciences, Math, and Technology (at least 7 hours and at least 4 of these hours must be in a lab science course)

Students will apply foundational principles of science, math, or technology to the process of scientific inquiry.

Area E—Social Sciences

Students will examine and articulate how constitutional, cultural, economic, geographic, historical, political, or social forces have shaped and continue to shape an evolving and diverse human experience.
Teaching Strategies

Strategies for teaching the student learning outcome throughout the academic program are clearly described. A curriculum map is included demonstrating in which program courses the student learning outcome is introduced, reinforced, and mastered. A description of why the teaching strategies were chosen or how they were developed is included. Strategies were chosen based on potential effectiveness and show a direct connection to student learning outcomes.
### Student Learning Outcomes

<table>
<thead>
<tr>
<th></th>
<th>PUBH 6532</th>
<th>PUBH 6533</th>
<th>PUBH 6534</th>
<th>PUBH 6535</th>
<th>PUBH 6541</th>
<th>PUBH 7131</th>
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<td>Demonstrate proficiency and</td>
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<td>of core public health principles</td>
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<td>and practices, both oral and</td>
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<td>Demonstrate proficiency in the</td>
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<td>health disciplines in practice and</td>
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<td>Demonstrate proficiency in problem</td>
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<td>solving, critical thinking, and</td>
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<td>public health leadership.</td>
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</table>
Types of Measures

- The outcome is measured with direct measure(s) & may be supplemented with indirect measure(s).
- Details regarding how every element of the measure relates to the outcome are provided.
- Specific test items or rubric traits are clearly linked to the outcome.
- Each level of the rubric is clearly explained.
- A description of the rubric or test development process is included to illustrate appropriateness & accuracy (validity & reliability) of the measurement tools.
Assessment Tool Continuum

Design all to foster learning outcomes

Formative

Direct
Assignments/Activities
- Journals
- Reading Logs
- Reflections
- Minute Papers
- Blogs
- In Class Questions-
closed response
- Brief Quizzes-
open ended or objective
- Mindset Point
- Clickers

Indirect

Assignments/Activities
- Measures
- Check lists
- Content Analyses
- Select correct response

Assignments/Activities
- Measures
- Response Papers
- Summaries
- Mini-Cases
- Problem Analyses
- Lab Report Components
- Presentations
- Mini Projects
- Others

Assignments/Activities
- Measures
- Rubrics- especially analytic
- Checklists

Assignments/Activities
- Measures
- Term Papers
- Reports
- Formal Essays
- Documented Papers
- Reviews
- Exams
- Capstone Projects
- Presentations
- Posters
- Lab Reports

Program Outcome Achievement

Summative

Surveys, Focus Groups, and Interviews

*Will align with program outcomes

Adapted with permission from Chris Anson (2016) by Georgia Southern University. Presented at the 2016 Annual AALHE Conference, Assessment 102: Measuring Learning.
Two Primary Methods

- **Objective Test**
  - Prior to developing create Test Blueprint
  - After administering perform Item Analysis

- **Performance-based Assignments**
  - Evaluate with Rubric (Analytic preferred to Holistic)
## Example Test Blueprint

<table>
<thead>
<tr>
<th>Content / Outcome Components</th>
<th>Knowledge</th>
<th>Understand</th>
<th>Apply</th>
<th>Analyze</th>
<th>Evaluate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td># questions</td>
<td># questions</td>
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<td>2.</td>
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<td>6.</td>
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</tbody>
</table>
### Example Analytic Rubric

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Missing</th>
<th>Inadequate</th>
<th>Needs Improvement</th>
<th>Adequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is able to design a reliable experiment that test the hypothesis</td>
<td>The experiment does not test the hypothesis.</td>
<td>The experiment tests the hypothesis, but due to the nature of the design it is likely the data will lead to an incorrect judgement</td>
<td>The experiment tests the hypothesis, but due to the nature of the design there is a moderate chance the data will lead to an inclusive judgement.</td>
<td>The experiment test the hypothesis and his a high likelihood of producing data that will lead to a conclusive judgment.</td>
</tr>
<tr>
<td>Is able to decide what parameters are to be measured and identify independent and dependent variables</td>
<td>The parameters are irrelevant.</td>
<td>Only some of parameters are relevant.</td>
<td>The parameters are relevant. However, independent and dependent variables are not identified.</td>
<td>The parameters are relevant and independent and dependent variables are identified.</td>
</tr>
<tr>
<td>Is able to analyze data appropriately</td>
<td>No attempt is made to analyze the data.</td>
<td>An attempt is made to analyze the data, but it is either seriously flawed or inappropriate.</td>
<td>The analysis is appropriate but it contains minor errors or omissions.</td>
<td>The analysis is appropriate, complete, and correct.</td>
</tr>
<tr>
<td>Is able to identify the shortcomings in an experimental design and suggest specific improvements</td>
<td>No attempt is made to identify any shortcomings or the experimental design.</td>
<td>An attempt is made to identify shortcomings, but they are described vaguely and no specific suggestions for improvements are made.</td>
<td>Some shortcomings are identified and some improvements are suggested, but not all aspects of the design are considered.</td>
<td>All major shortcomings of the experiment are identified and specific suggestions for improvement are made.</td>
</tr>
</tbody>
</table>

Example Analytic Rubric
The data collection process is clearly explained, contains no methodological flaws, & thus can make justifiable claims about the findings.

The data collection process includes information about student population, a rationale for representative sampling, alignment of assignment(s) & measurement instruments with SLOs, consistent assignment parameters, adequate & consistent motivation conditions, & in the case of rubrics, multiple trained raters.
Targets are specific & justified.
Targets are aligned with outcomes & measures.
Targets are based on current disciplinary standards, previous results, &/or benchmarks.
Targets represent a reasonable level of student success.
Targets were developed based on the input of multiple faculty.
Multiple levels of performance are described, suggesting basic (acceptable) & higher (desired) levels of performance.
Presentation of Results

- Results are presented by SLO & an explanation is provided about how the results directly relate to the measures & targets.
- Tables & graphs effectively communicate results.
- For multiple choice exams, results are presented according to the test blueprint (alignment of question, SLO, & cognitive level) and includes item analysis information.
- For rubrics, results are presented according to rubric trait & show a direct correspondence to the SLO.
- Students’ performance strengths & weaknesses are clearly visible.
- New findings are compared to past trends, as appropriate.
Interpretation of results is reasonable given the outcomes, measures, methodology, & targets. It is aligned with the program’s action plans, detailed enough to justify programmatic decisions concerning changes in curriculum or instruction, & is sufficient to support programmatic decisions.

Interpretation includes how classes, activities, sampling, & other limitations might have affected results.

It is evident that multiple faculty participated in the analysis & discussion.
Results of Prior Action Plans Implementation

- A copy of the proposed action plan from the previous cycle is included.
- All proposed actions from the prior year’s action plan are addressed.
- If actions proposed during the previous cycle were not implemented, reasonable justification is given.
- If actions taken during the current cycle were not proposed during the previous cycle, they are reasonably justified through external evidence.
- The report reflects with sufficient depth on the implementation of proposed actions & the data returned from them during the assessment cycle.
- Elements are focused primarily on student learning; modifications to the assessment process are minimized.
- Actions were implemented by multiple faculty.
- Additional documentation is provided showing the implementation of proposed actions (e.g., meeting minutes, curriculum change forms, etc.).
Proposed Action Plans for Next Academic Year

- The connection between proposed actions & program SLOs is clear.
- Proposed actions directly relate to the assessment findings, & focus on the improvement of the educational program & student learning.
- Proposed actions demonstrate evidence of input from multiple faculty.
- Carryover actions from the previous cycle are noted.
- Proposed actions are specifically detailed, including approximate dates of implementation & notes about where in the curriculum & in specific classes they will occur.
- If a SLO is not addressed by any proposed actions, justification is given for maintenance of ongoing curriculum & instruction.
I taught Stripe how to whistle.

I don't hear him whistling.

I said I taught him. I didn't say he learned it.