Assessment Workshop: Overview October 21

Each Chair or Director has access to an online annual assessment form: docs.google.com

- While programs aren't required to use these forms, programs are required to meet expectations
- Deans and the Assessment Committee can view these forms and provide feedback
- You can give faculty permission to edit the assessment form
- Email me if you have any issues with the form: thiessenbradleya@sau.edu

The forms contain 7 worksheets:

1. **Cover sheet**

   Deadlines: January 1 = Complete program information and assessment plan (at least SLOs)
   May 15 = Complete curriculum map
   July 1 = Submit assessment results

   Goals: All academic programs will participate by May 2015
   All academic programs will meet all institutional expectations by July 2016

2. **Program Information** (basic contact information)

   Name of department and program
   Name of Chair or Director
   Name of individual to contact with any assessment-related issues
   Date of next EPC review
   Name of accrediting organization, if applicable

3. **Assessment Plan** (how you assess program student learning outcomes)

	Student Learning Outcomes	Assessment Methods/Instruments	Quality	Who will be assessed?	Logistics	Schedule	Criteria (optional)
1	For instructions and tips, move your mouse to the column headings (near the black triangles)						
2							

4. **Curriculum Map** (to show how curriculum aligns with outcomes)

		SLO 1	SLO 2
Course/Activity 1	Level addressed		
	Level assessed		
	Instrument		
Course/Activity 2	Level addressed		
	Level assessed		
	Instrument		

5. **Results** (blank page to submit any assessment results)

   Deadlines: January 1 = Complete program information and assessment plan

6. **Rubric** (explaining our institutional expectations for assessment)

   Deadlines: January 1 = Complete program information and assessment plan

7. **Feedback** (blank page where the Assessment Committee can make comments)

Student Learning Outcomes (SLOs): Clear statements of the knowledge, skills, attitudes, and values we intend students to gain and demonstrate as a result of the program

Types:
- **Cognitive**: What should students know?
- **Affective**: What should students think or care about?
- **Behavioral**: What should students be able to do?
- **Psychomotor**: What actions should students be able to perform?
- **Mastery**: Specific minimum competencies that must be met prior to program completion
- **Developmental**: Higher-order, complex outcomes in which students can be expected to demonstrate varying degrees of progress

Developing SLOs:

- Bottom-up
  a) Look at outcomes and key assignments/projects/experiences you require for your majors
  b) Identify common themes or elements across courses
  c) Discuss whether these themes represent the most important knowledge, skills, attitudes, and dispositions
  d) Add, delete, or modify outcomes
  e) Think about the standards or expectations you have for students. Try to add criteria to SLOs

- Top-down
  a) Review your department mission, goals, and outcomes (from previous program review)
  b) Review and modify the mission, goals, and outcomes to reflect your values and current priorities (and professional standards in the discipline)
  c) Develop specific student learning outcomes from these guiding elements
  d) Would these outcomes communicate your expectations to students?

- Identical twins
  a) Picture twins – identical in every way. One decides to complete your program; the other doesn't
  b) By the end of the program, how do these twins differ?
  c) Write outcomes to reflect the additional knowledge, skills, attitudes, and values of the twin who completed your program

- Aspirational
  a) What does the ideal graduate from your program know, care about, or value? What can he/she do?
  b) What would you tell a prospective student to expect the program to give him or her?
  c) What are the educational or career achievements of your program's successful alumni?

- The sincerest form of flattery
  a) Search for outcomes developed by professional organizations or aspirational peers in your field
  b) Modify these outcomes to reflect how your program is distinct from peers and competitors

St. Ambrose assessment information: http://www.sau.edu/Assessment.html
thiessenbradleya@sau.edu
x6160

Writing SLOs:

As a result of the program, students will be able to...

{action verb describing an observable behavior, skill, or attitude} (see list of action verbs)

{at a level of competency appropriate for the degree} (recommended; not required)

when given {context} (recommended; not required)

Evaluating SLOs:

___ Does the SLO specify what you intend students to demonstrate or produce?
SLOs should NOT be statements of what an instructor will do.

___ Does the SLO represent an outcome and NOT a process (e.g., participate in..., exposure to...)?

___ Does the outcome include a specific, measurable action verb?
Note: Not knowing how to measure the behavior does NOT necessarily mean the SLO is bad

___ Is the outcome clearly written? Would someone outside your discipline understand the SLO?

___ Is the outcome at a level appropriate for the degree? Do you have some higher-order SLOs?

___ Is the outcome attainable for students who complete your program?

___ Is the SLO relevant to your program?
Your list of SLOs should represent most of what you value and should align with your mission
Your SLOs should align with the curriculum and educational practices of your program
Your SLOs should be collaboratively authored and collectively accepted

___ Does the SLO align with outcome statements from professional organizations in your field?

___ (optional) Do SLOs reflect how your program is distinct from peers and competitors?

___ (optional) Do SLOs describe the context in which students demonstrate attainment?

___ (optional) Do SLOs specify criteria to determine if students meet expectations?

Recommendations that are usually stated as requirements:

1) SLOs should not be compound or bundled; the should represent a single behavior
e.g.: Persevere in modeling & solving (non-)routine problems, using appropriate resources strategically
Counter-argument: Some program-level outcomes may be complex and multidimensional
We're going to use multiple assessments to assess each outcome

2) SLOs should not impose restrictions on the type or number of assessments that can be used
e.g.: Students will score over 90% on a locally-developed exam
Counter-argument: A valid outcome might be passing a licensure or certification exam

3) Avoid vague verbs like understand, appreciate, know, be aware of, comprehend, show interest in, etc
e.g.: Appreciate the career and educational opportunities for mathematics majors
Counter-argument: If your choice of assessment defines these verbs, they can remain in SLOs

Cognitive

http://uwf.edu/cutla/SLO/ActionWords.pdf

Knowledge: copy, define, describe, discover, duplicate, enumerate, examine, identify, label, list, listen, locate, match, memorize, name, observe, omit, quote, read, recall, recite, recognize, record, repeat, reproduce, retell, select, state , tabulate, tell, visualize

Comprehension: ask, associate, cite, classify, compare, contrast, convert, demonstrate, describe, differentiate, discover, discuss, distinguish, estimate, examples, explain, express, extend, generalize, give, group, identify, illustrate, indicate, infer, interpret, judge, observe, order, paraphrase, predict, relate, report, represent, research, restate, review, rewrite, select, show, summarize, trace, transform, translate

Application: act, administer, apply, articulate, calculate, change, chart, choose, collect, complete, compute, construct, demonstrate, determine, develop, discover, dramatize, employ, establish, examine, experiment, explain, illustrate, interpret, interview, judge, list, manipulate, modify, operate, paint, practice, predict, prepare, produce, record, relate, report, schedule, show, simulate, sketch, solve, teach, transfer, use, write

Analysis: advertise, analyze, appraise, break, calculate, categorize, classify, compare, conclude, connect, contrast, correlate, criticize, deduce, devise, diagram, differentiate, discriminate, dissect, distinguish, divide, down, estimate, evaluate, experiment, explain, focus, illustrate, infer, order, organize, out, outline, plan, point, prioritize, question, select, separate, subdivide, survey, test

Synthesis: adapt, anticipate, arrange, assemble, choose, collaborate, collect, combine, compile, compose, construct, create, design, develop, devise, express, facilitate, formulate, generalize, hypothesize, imagine, infer, integrate, intervene, invent, justify, make, manage, modify, negotiate, organize, originate, plan, prepare, produce, propose, rearrange, reorganize, report, revise, rewrite, role-play, schematize, simulate, solve, speculate, structure, substitute, support, synthesize, test, validate, write

Evaluation: appraise, argue, assess, choose, compare, conclude, consider, convince, criticize, critique, debate, decide, defend, discriminate, distinguish, editorialize, errors, estimate, evaluate, find, grade, judge, justify, measure, order, persuade, predict, rank, rate, recommend, reframe, score, select, summarize, support, test, weigh

Affective

http://www.naacls.org/docs/announcement/writing-objectives.pdf

Receiving: Accept, Acknowledge, Attend (to), Follow, Listen, Meet, Observe, Receive

Responding: Agree, Allow, Answer, Ask, Assist, Attempt, Choose, Communicate, Comply, Conform, Cooperate, Demonstrate, Describe, Discuss, Display, Exhibit, Follow, Give, Help, Identify, Locate, Notify, Obey, Offer, Participate (in), Practice, Present, Read, Relay, Reply, Report, Respond, Select, Try

Valuing: Adopt, Aid, Care (for), Complete, Compliment, Contribute, Delay, Encourage, Endorse, Enforce, Evaluate, Expedite, Foster, Guide, Initiate, Interact, Join, Justify, Maintain, Monitor, Praise, Preserve, Propose, Query, React, Respect, Seek, Share, Study, Subscribe, Suggest, Support, Thank, Uphold

Organizing: Anticipate, Collaborate, Confer, Consider, Consult, Coordinate, Design, Direct, Establish, Facilitate, Follow through, Investigate, Judge, Lead, Manage, Modify, Organize, Oversee, Plan, Qualify, Recommend, Revise, Simplify, Specify, Submit, Synthesize, Test, Vary, Weigh

Characterization: Act, Administer, Advance, Advocate, Aid, Challenge, Change, Commit (to), Counsel, Criticize, Debate, Defend, Disagree, Dispute, Empathize, Endeavor, Enhance, Excuse, Forgive, Influence, Motivate, Negotiate, Object, Persevere, Persist, Praise, Profess, Promote, Promulgate, Question, Reject, Resolve, Seek, Serve, Solve, Strive, Tolerate, Volunteer (for)

Psychomotor

http://courses.washington.edu/pharm439/Bloomstax.htm

Imitation, Manipulation, Precision, Articulation, Naturalization

Verbs: Absorb, Add, Adjust, Adsorb, Aliquot, Apply, Aspirate, Assemble, Balance, Bind, Blend, Build, Calculate, Calibrate, Centrifuge, Change, Choose, Classify, Clean, Collate, Collect, Combine, Confirm, Connect, Construct, Control, Cool, Correct, Count, Create, Crush, Cut, Decant, Demonstrate, Describe, Design, Dialyze, Differentiate, Dilute, Discard, Dismantle, Dispense, Dispose, Dissect, Dissolve, Drain, Draw, Dry, Elute, Employ, Estimate, Evacuate, Examine, Expel, Fasten, Fill, Filter, Fractionate, Frame, Freeze, Grade, Grasp, Grind, Group, Guide, Handle, Heat, Identify, Illustrate, Incubate, Inject, Input, Insert, Invert, Investigate, Isolate, Label, Localize, Locate, Lyse, Macerate, Maintain, Make, Maneuver, Manipulate, Mark, Measure, Mix, Moisten, Mount, Observe, Obtain, Open, Operate, Pack, Palpate, Participate, Perform, Pick, Pipet, Place, Plate, Plot, Position, Pour, Prepare, Press, Process, Produce, Program, Pull, Puncture, Push, Read, Record, Release, Remove, Replace, Retest, Rinse, Roll, Rotate, Save, Scan, Score, Screen, Seal, Select, Sensitize, Separate, Set, Sever, Shake, Sharpen, Ship, Siphon, Spin, Spread, Squeeze, Stain, Standardize, Start, Stick, Stir, Stop, Stopper, Store, Suspend, Take, Test, Thaw, Thread, Tilt, Time, Tip, Titrate, Touch, Transfer, Trim, Troubleshoot, Turn, Type, Use, Utilize, View, Warm, Wash, Watch, Weigh, Wipe, Withdraw, Wrap

Degree Qualifications Profile

	Bachelor's Level	Master's Level
Specialized knowledge:	Defines and explains the boundaries and major sub-fields, styles, and/or practices of the field. Defines and properly uses the principal specialized terms used in the field, both historical and contemporaneous. Demonstrates fluency in the use of tools, technologies and methods common to the field. Evaluates, clarifies and frames a complex question or challenge, using perspectives and scholarship drawn from the student's major field and at least one other field. Constructs a project related to a familiar but complex problem in his/her field of study by independently assembling, arranging and reformulating ideas, concepts, designs and/or techniques. Constructs a summative project, paper, performance or practice-based performance that draws on current research, scholarship and/or techniques in the field.	Elucidates the major theories, research methods and approaches to inquiry and/or schools of practice in his or her field; articulates their sources; and illustrates both their applications and their relationships to allied fields. Assesses the contributions of major figures (and/or organizations, if applicable) in his or her field, describes the major methodologies and/or practices in his or her field; and implements at least two of them through projects, papers, exhibits or performances. Articulates a full range of challenges involved in practicing the field; elucidates the lead- ing edges of the field; and delineates the current limits of theory, knowledge and/or practice in the field by independently initiating, assembling, arranging and reformulating ideas, concepts, designs and/or techniques in carrying out a project directed at a challenge in his or her field that lies outside conventional boundaries.
Integrative knowledge:	Frames a complex scientific, social, technological, economic or aesthetic challenge or problem from the perspectives and literature of at least two academic fields, and proposes a "best approach" to the question or challenge using evidence from those fields. Produces, independently or collaboratively, an investigative, creative or practical work that draws on specific theories, tools and methods from at least two academic fields. Explains a contemporary or recurring challenge or problem in science, the arts, society, human services, economic life or technology from the perspective of at least two academic fields, explains how the methods of inquiry and/or research in those disciplines can be brought to bear in addressing the challenge, judges the likelihood that the combination of disciplinary perspectives and methods would contribute to the resolution of the challenge, and justifies the importance of the challenge in a social or global context.	Articulates how his or her own field has developed in relation to other major domains of inquiry and/or practice. Designs and executes an applied, investigative or creative work that draws on the perspectives and/or methods of other fields, and assesses the resulting gains and/or difficulties of including fields other than his or her own. Articulates and defends the significance and implications of his or her own specialized work in terms of challenges, trends and/or developments in a social or global context.
Analytic Inquiry:	Differentiates and evaluates theories and approaches to complex standard and non-standard problems within his or her major field and at least one other academic field.	Disaggregates, adapts, reformulates and employs principal ideas, techniques or methods at the forefront of his or her field of study in the context of an essay or project.
Use of Info Resources:	Incorporates multiple information resources presented in different media and/or different languages, in projects, papers or performances, with citations in forms appropriate to those resources, and evaluates the reliability and comparative worth of competing information resources. Explicates the ideal characteristics of current information resources for the execution of projects, papers or performances; accesses those resources with appropriate delimiting terms and syntax; and describes the strategies by which he/she identified and searched for those resources.	Provides adequate evidence (through papers, projects, notebooks, computer files or catalogues) of contributing to, expanding, assessing and/or refining either a broadly recognized information resource or an information base within his or her field of study.
Engaging diverse perspectives:	Constructs a cultural, political, or technological alternative vision of either the natural or human world, embodied in a written project, laboratory report, exhibit, performance, or community service design; defines the distinct patterns in this alternative vision; and explains how they differ from current realities.	Addresses a core issue in his/her field of study from the perspective of either a different point in time, or a different culture, language, political order, or technological context, and explains how the alternative perspective contributes to results that depart from current norms, dominant cultural assumptions, or technologies – all demonstrated through a project, paper, or performance.

	Bachelor's Level	Master's Level
Quantitative fluency:	Translates verbal problems into mathematical algorithms and constructs valid mathematical arguments using the accepted symbolic system of mathematical reasoning. Constructs, as appropriate to his or her major field (or another field), accurate and relevant calculations, estimates, risk analyses or quantitative evaluations of public information and presents them in papers, projects or multi-media events.	Students who are not seeking a degree in a quantitatively based field employ and apply mathematical, formal logic and/or statistical tools to problems appropriate to their field in a project, paper or performance. Students seeking a degree in a quantitatively based or quantitatively relevant field articulate and/or undertake multiple appropriate applications of quantitative methods, concepts and theories within their field of study.
Comm. Fluency:	Constructs sustained, coherent arguments and/or narratives and/or explications of technical issues and processes, in two media, to general and specific audiences. In a language other than English, and either orally or in writing, conducts an inquiry with a non-English-language source concerning information, conditions, technologies and/or practices in his or her major field. With one or more oral interlocutors or collaborators, advances an argument or designs an approach to resolving a social, personal or ethical dilemma.	Creates sustained, coherent arguments or explanations and reflections on his or her work or that of collaborators (if applicable) in two or more media or languages, to both general and specialized audiences.
Applied Learning:	Presents a discrete project, paper, exhibit or performance, or other appropriate demonstration that links knowledge and/or skills acquired in work, community and/or research activities with knowledge acquired in one or more disciplines; explains in writing or an- other medium how those elements were combined in the product to shape its intended meaning or findings; and employs appropriate citations to demonstrate the relationship of the product to literature in its field. Formulates a question on a topic that addresses more than one academic discipline or practical setting, locates appropriate evidence that addresses the question, evaluates the evidence in relation to the problem's contexts, and articulates conclusions that follow logically from such analysis. Completes a substantial field-based project related to his or her major course of study; seeks and employs insights from others in implementing the project; evaluates a significant challenge or question faced in the project in relation to core concepts, methods or assumptions in his or her major field; and describes the effects of learning outside the classroom on his or her research or practical skills.	Creates a discrete project, paper, exhibit, performance or other appropriate demonstration reflecting the integration of knowledge acquired in practicum, work, community, and/or research activities with knowledge and/or skills gleaned from at least two academic disciplines in different segments of the curriculum (e.g., computer science and anthropology); fully documents the sources of the knowledge and/or skills reflected in the integration; articulates in writing how these elements influenced the resulting product; and assesses the significance of the work in light of major debates or developments in the student's primary field(s). Creates, designs and implements a project or performance in an out-of-class setting that requires the application of advanced knowledge gained in the program to a practical challenge; articulates in writing or another medium the insights gained from the field experience; assesses, with appropriate citations, selected approaches and/or scholarly debates applicable to the problem; articulates a reasoned judgment on selected issues encountered in the field; and assesses his or her own standards for professional performance and continuing development with specific reference to the experience.
Civic Learning:	Explains diverse positions, including those of different cultural, economic and geo- graphic interests, on a contested issue, and evaluates the issue in light of both those interests and evidence drawn from journalism and scholarship. Develops and justifies a position on a public issue and relates the position taken to alter- native views within the community/policy environment. Collaborates with others in developing and implementing an approach to a civic issue, evaluates the strengths and weaknesses of the process and, where applicable, the result.	Assesses and develops a position on a public policy question with significance in the student's own field, taking into account both scholarship and published positions and narratives of relevant interest groups.

Examples of SLOs from St. Ambrose programs:

- Does the SLO specify what you intend students to demonstrate or produce; not what instructors do?
  - To enhance knowledge of human resource issues facing organizations
  - Majors will be encouraged to develop communication skills essential to political participation
  - By the completion of the senior seminar, majors will have been encouraged and assisted to read primary philosophical texts
- Does the SLO represent an outcome and NOT a process (e.g., participate in..., exposure to...)?
  - Deftly read secondary sources
  - Each student will learn information about music theory and music history/literature that enhances their music-making and listening
  - Reflect on the relationship between theology and practice
  - Majors can competently participate in debates and dialogues concerning management issues
  - Each student will maximize their performance skills in their major applied area through ongoing study and performance as a soloist and in ensembles
- Does the outcome include a specific, measurable action verb?
  - Majors understand the origin of life and the process of evolution
  - Understand Business Concepts related to accounting, economics, finance, management and marketing
  - Demonstrates an understanding of the social construction of knowledge and understands the function of gender as a category of analysis
  - Demonstrate an understanding of literature by identifying, describing, and discussing a variety of periods, genres, and works
  - An understanding of professional and ethical responsibility
  - A knowledge of contemporary issues
  - Demonstrate a breadth and depth of knowledge appropriate for a bachelor's degree in mathematics
  - Our graduates understand the fundamentals of business and how the pieces of their graduate education fit into the wider context of business
  - Students will develop an understanding and a connection to the value and elements of the process of theatre
  - Majors will read primary texts in political science to gain a basic understanding of important political scholars, theories, philosophies, and models
  - The student will demonstrate understanding of the logic and method of statistical analysis in the examination of complex social problems
  - Appreciate the development of doctrine within the Christian tradition
  - Appreciate the career and educational opportunities for mathematics majors
  - Theoretical & practical knowledge in the 4 main areas of chemistry: analytical, inorganic, organic, physical
  - Achieve competency of the medium and technical skill
- Is the outcome clearly written? Would someone outside your discipline understand the SLO?
  - Laboratory skills needed in the modern chemical laboratory
  - Demonstrate a variety of critical methods of Biblical interpretation
- Is the outcome at a level appropriate for the degree? Do you have some higher-order SLOs?
  - Identify cultural differences, similarities, and stereotypes
  - Identify the major regions of the world where the target language is spoken
- SLOs should not be compound or bundled; the should represent a single behavior
  - Persevere in modeling & solving (non-)routine problems, using appropriate resources strategically
- SLOs should not impose restrictions on the type or number of assessments that can be used
  - 100% passing 74% or higher on Nursing Process Paper