GENERAL EDUCATION ALIGNMENT OF GE AREAS WITH BACCALAUREATE LEARNING OUTCOMES

Area A Discussion – March 7, 2014

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TODAY'S AGENDA

- *Review the Sac State Baccalaureate Learning Outcomes*
- *Discussion reason for review and revision of GE Areas*
- *Review revised GE Area outcomes in Areas E and B*
- *Review AAC&U Values Rubrics*
- *Review connection between AAC&U Value Rubrics and Sac State Baccalaureate Learning Outcomes*
- *Discuss processes for student engagement*
- *Discuss High Impact Practices*
- *Begin visioning process for developing outcomes for Area A*

SAC STATE BACCALAUREATE LEARNING GOALS (2009)

- ***Competence in the Disciplines****: The ability to demonstrate the competencies and values listed below in at least one major field of study and to demonstrate informed understandings of other fields, drawing on the knowledge and skills of disciplines outside the major.*
- ***Knowledge of Human Cultures and the Physical and Natural World*** *through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts. Focused by engagement with big questions, contemporary and enduring.*
- ***Intellectual and Practical Skills, Including:*** *inquiry and analysis, critical and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork and problem solving, practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance.*

- ***Personal and Social Responsibility, Including**: civic knowledge and engagement—local and global,* intercultural knowledge and competence, ethical reasoning and action, foundations and skills for lifelong learning anchored through active involvement with diverse communities and real-world challenges.*
- ****Integrative Learning, Including**: synthesis and advanced accomplishment across general and specialized studies.*

All of the above are demonstrated through the application of knowledge, skills, and responsibilities to new settings and complex problems.

ALIGNMENT NEEDED

- *Between the 5 Baccalaureate Learning Goals and the 5 GE Areas*
- *Town hall meetings, brainstorming sessions and working groups yielded*
  - *Outcomes for Area B -- implemented*
  - *Outcomes for Area E -- implemented*
  - *Outcomes for Area D – just passed the Senate*
  - *Outcomes for Area C – About to be reviewed by the Senate*

EXAMPLE OF REVISED LEARNING OUTCOMES: AREA E

Learning Goals

1. Students will demonstrate an understanding of academic content knowledge regarding self-development as a physiological, social and/or psychological being.

2. Students will critically examine prior or current experiences or behaviors from their own lives in response to real world physiological, social and/or psychological contexts (may be evident in self-assessment, reflection or creative work).

3. Students will apply skills and knowledge regarding development of the self to differing situations, such as real world challenges, and/or to make connections across perspectives.

Learning Outcomes

1. Students will be able to identify their own perspective and make connections/comparisons across perspectives.

2. Students will be able to plan, monitor, and assess their own learning.

3. Students will be able to set personal and/or professional goals.

Example of revised learning outcomes: Area B

AREA B-1 PHYSICAL SCIENCE STUDENT LEARNING OUTCOMES.

Drawing upon one or more of the physical sciences, students will be able to:

- ***Explain and apply core ideas and models concerning physical systems and mechanisms, citing critical observations, underlying assumptions and limitations.***

- ***Describe how scientists create explanations of natural phenomena based on the systematic collection of empirical evidence subjected to rigorous testing and/or experimentation.***

- ***Access and evaluate*** *scientific information, including interpreting tables, graphs and equations.*

- ***Recognize*** *evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.*

AREA B-2 LIFE FORMS STUDENT LEARNING OUTCOMES

Drawing upon one or more of the life sciences, students will be able to:

- ***Explain*** *and apply core ideas and models concerning living systems and life forms, citing critical observations, underlying assumptions and limitations.*
- ***Describe*** *how scientists create explanations of natural phenomena based on the systematic collection of empirical evidence subjected to rigorous testing and/or experimentation.*
- ***Access and evaluate*** *scientific information, including interpreting tables, graphs and equations.*
- ***Recognize*** *evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.*

AREA B-3 LAB COMPONENT STUDENT LEARNING OUTCOMES

Students will be able to:

- ***Use*** *their senses and scientific instruments to gather, organize, and display empirical data.*
- ***Identify*** *patterns in data and use these to hypothesize underlying relationships.*
- ***Explain and apply*** *scientific techniques for coping with complexity and variability in the natural world.*

AREA B-4 MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING STUDENT LEARNING OUTCOMES.

Students will be able to:

- ***Solve*** *problems by thinking logically, making conjectures, and constructing valid mathematical arguments.*
- ***Make*** *valid inferences from numerical, graphical and symbolic information.*
- ***Apply*** *mathematical reasoning to both abstract and applied problems, and to both scientific and non-scientific problems.*

AREA B-5 FURTHER STUDIES STUDENT LEARNING OUTCOMES

Students will be able to do one or more of the following:

- ***Cite*** *critical observations, underlying assumptions and limitations to explain and apply important ideas and models in one or more of the following: physical science, life science, mathematics, or computer science.*
- ***Recognize*** *evidence-based conclusions and form reasoned opinions about science-related matters of personal, public and ethical concern.*
- ***Discuss*** *historical or philosophical perspectives pertaining to the practice of science or mathematics.*

LEARNING OUTCOMES

- *Help us to structure courses*
- *Help us to more easily assess learning across GE areas*
- *Support students in their efforts to understand and connect ideas across classes and disciplines*
- *Help us to create better opportunities for students to engage*

HOW DO WE ENGAGE STUDENTS?

- *Articulate and clarify learning outcomes*
- *Cultivate curiosity*
- *Draw from value rubrics from American Association of Colleges & Universities (AAC&U)*
- *Create structured learning environments*
  - *The more students are engaged, the more attentive they are*
  - *The more attentive, the more committed they are to the PROCESS of learning;*
  - *Learning transfer occurs from one committed context to the next;*
  - *The more committed, the more likely they are to complete their courses and their degrees*

AAC&U VALUE RUBRIC: MOTIVATED AND SUSTAINED LEARNING

- ***Lifelong Learning:*** *"all purposeful learning activity, undertaken on an ongoing basis with the aim of improving knowledge, skills and competence"*
- ***Integrative Thinking:*** *"…an understanding and a disposition that a student builds across the curriculum and co-curriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus…"*

MOTIVATED AND SUSTAINED LEARNING

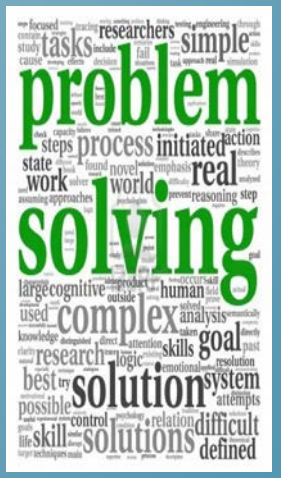
- ***Intercultural Competence***
- *"…a set of cognitive, affective, and behavioral skills and characteristics that support effective and appropriate interaction in a variety of cultural contexts." (Bennett, J. M. 2008)*
- ***Information literacy***
- *"…to know when there is a need for information, to be able to identify, locate, evaluate, and effectively and responsibly use and share that information for the problem at hand…"*

AAC&U VALUES RUBRIC: COGNITION

- ***Critical thinking:*** *"…a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion…"*
- ***Creative thinking:*** *"…the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking…"*
- ***Inquiry and analysis:*** *"Inquiry is a systematic process of exploring issues, objects or works through the collection and analysis of evidence that results in informed conclusions or judgments. Analysis is the process of breaking complex topics or issues into parts to gain a better understanding of them."*

COGNITION

- *Problem solving: "… designing, evaluating and implementing a strategy to answer an open-ended question or achieve a desired goal…"*
- *Ethical reasoning: "… reasoning about right and wrong in human conduct…"*
- *Quantitative reasoning: "… reason[ing] and solv[ing] quantitative problems from a wide array of authentic contexts and everyday life situations…"*



AAC&U VALUES RUBRIC: COMMUNICATION

- *Oral Communication: "…a prepared, purposeful presentation designed to increase knowledge, to foster understanding, or to promote change in the listeners' attitudes, values, beliefs, or behaviors…"*
- *Written Communication: "…the development and expression of ideas in writing… learning to work in many genres and styles… working with many different writing technologies… mixing texts, data, and images… develop through iterative experiences across the curriculum…"*
- *Reading: "…the process of simultaneously extracting and constructing meaning through interaction and involvement with written language" (Snow et al., 2002)*

AAC&U VALUE RUBRIC: DEMOCRATIC PARTICIPATION AND ENGAGEMENT

- ***Civic engagement:*** *"…working to make a difference in the civic life of our communities; [combining] knowledge, skills, values and motivation to make that difference…; promoting the quality of life in a community, through both political and non-political processes"*
- ***Teamwork:*** *"…the quality of a process, rather than the quality of an end product… collections include some evidence of the individual's interactions within the team… final product of the team's work (e.g., a written lab report) is insufficient,…"*

Sac State Baccalaureate Learning Outcomes	AAC&U Value Rubric Components	How are components of Value Rubrics linked to Sac State Baccalaureate Learning Outcomes	
Competence in the Disciplines in *at least one major field of study* and informed understandings of other fields, drawing on the knowledge and skills of disciplines outside the major.	**Motivated and Sustained learning** Lifelong Learning Integrative Thinking Intercultural Competence Information Literacy	**Competence in the Disciplines** in ***at least one major field of study*** and informed understandings of other fields, drawing on the knowledge and skills of disciplines outside the major.	**Information Literacy** Lifelong Learning
Knowledge of Human Cultures and the Physical and Natural World. Focused by engagement with big questions, contemporary and enduring.	**Communication** Oral Communication Written Communication Reading	**Knowledge of Human Cultures and the Physical and Natural World.** Focused by engagement with big questions, contemporary and enduring.	**Information Literacy** Inquiry and Analysis Problem Solving Ethical Reasoning
Intellectual and Practical Skills Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, & standards for performance.	**Democratic Participation and Civic Engagement** Civic Engagement Teamwork	**Intellectual and Practical Skills** Practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, & standards for performance.	**Oral Communication** **Written Communication** **Reading** **Information Literacy** Integrative Thinking Inquiry and Analysis Problem Solving Ethical Reasoning
Personal and Social Responsibility: anchored through active involvement with diverse communities and real-world challenges.	**Cognition** Critical Thinking Creative Thinking Inquiry and Analysis Problem Solving Ethical Reasoning Quantitative Reasoning	Personal **and Social Responsibility**: anchored through **active involvement** with diverse communities and real-world challenges.	Inquiry and Analysis Problem Solving Ethical Reasoning **Civic Engagement** **Teamwork** Intercultural Competence
Integrative Learning, Including:** *synthesis and advanced accomplishment* across general and specialized studies.		**Integrative Learning**, Including:** *synthesis and advanced accomplishment* across general and specialized studies.	**Integrative Thinking**
Demonstrated through application of knowledge, skills, and responsibilities to new settings and complex problems.		***Demonstrated through application of knowledge, skills, and responsibilities to new settings and complex problems.***	**Lifelong Learning**

HOW DO THE BACCALAUREATE LEARNING OUTCOMES AND VALUE RUBRICS CONTRIBUTE TO HIGH IMPACT PRACTICES? OVERLAPPING/INTERSECTING

- *High Impact Practices*
- *Program, Major, Course Projects*

BLOOM'S TAXONOMY -- REVISED

VISIONING PROCESS FOR DEVELOPING LEARNING OUTCOMES: PICK 5 ITEMS FROM THE VALUE RUBRICS LISTED BELOW AND DISCUSS POSSIBLE ASSIGNMENTS/TASKS THAT WOULD DEMONSTRATE EVIDENCE OF STUDENT LEARNING

One…

- Lifelong Learning
- Integrative Thinking
- Intercultural Competence
- Information Literacy
- Critical Thinking

Two…

- Creative Thinking
- Inquiry and Analysis
- Problem Solving
- Ethical Reasoning
- Quantitative Reasoning

Three…

- Oral Communication
- Written Communication
- Reading
- Civic Engagement
- Teamwork

TIMELINE AND PROCESS

- *General Meetings (S 14)*
- *Workgroups (S 14)*
- *Review Draft Outcomes (S 14)*
- *Recommend to GE/GRPC (F 14)*
- *Senate Ratifies (F 14)*