TO: Steering Committee of the University Senate FROM: University Senate Educational Policy Committee

SUBJECT: Undergraduate Outcomes-Based Curriculum and Administration &

Oversight Structure

DISPOSITION: University Senate for Approval

The Educational Policy Committee hereby forwards to the University Senate the attached report and proposal about the proposed new Undergraduate Outcomes-Based Curriculum and Administration & Oversight Structure. This report provides the background information and confirms that there has been active faculty involvement in the discussion and planning for the creation and implementation of the new undergraduate outcomes-based curriculum and oversight structure.

APPENDICES

Appendix A: Learning Outcomes

Foundational Learning Outcomes

1. **Written Communication** -- Clear expression of ideas in writing; includes grammar, organization, and structure. Varying levels and types of writing skills are required for different jobs. The ability to convey ideas concisely and coherently is important.

Key Skills:

- Demonstrates understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses on all elements of the work.
- Uses appropriate and relevant content to explore ideas and/or demonstrate mastery of the subject, conveying the writer's understanding, and shaping the work.
- Demonstrates attention to and successful execution of organization, content, presentation, format and stylistic choices in writing.
- Demonstrates use of credible, relevant resources to support ideas that are situated within the discipline and genre of writing.
- Uses language that effectively communicates meaning to readers with clarity and fluency.
- 2. **Information Literacy**—Information literacy is the ability to recognize the extent and nature of information need, then to locate, evaluate, and effectively use the needed information. It involves designing, evaluating and implementing a strategy to answer questions or achieve a desired goal.

Key skills

- Determine the extent of information needed (define the research question, determine key concepts and types of information needed)
- Access information using effective, well-designed search strategies and relevant information sources.
- Evaluate information and its sources critically (analyzes assumptions and evaluates the relevance of contexts when presenting a position)
- Communicate, organize and synthesize information from several sources.
- Access and use information ethically and legally (citations and references; paraphrasing, summary, or quoting; distinguishing between common knowledge and ideas requiring attribution)
- Propose a solution/hypothesis that indicates comprehension of the problem and is sensitive to contextual factors as well as the ethical, logical, or cultural dimensions of the problem.
- Demonstrate an understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.
- 3. **Oral Communication** activity of conveying meaningful information verbally; communication by word of mouth typically relies on words, visual aids and non-verbal elements to support the conveyance of the meaning. Oral communication is designed to increase knowledge, foster understanding, or to promote change in the listener's attitudes, values, beliefs, or behaviors.

Key Skills:

- Uses appropriate organizational patterns (introduction, conclusion, sequenced material, transitions) that is clearly and consistently observable when making presentations
- Uses language that is thoughtful and generally supports the effectiveness of the presentation (and is appropriate to the audience).
- Uses appropriate delivery techniques when making a presentation (posture, gesture, eye contact, vocal expression)
- Effectively uses supporting materials in presentations (explanations, examples, illustrations, statistics, analogies, quotations)
- Clearly communicates a central message with the supporting materials

4. **Science, Technology and Mathematics** -- the ability to understand and apply basic scientific, quantitative, and technological content knowledge.

Key skills:

- Science: think and function as a scientist by using critical thinking and analytical inquiry; apply
 basic scientific, quantitative, and technological methods and knowledge of nature to the solution of
 scientific problems; use the scientific method and theories to analyze questions in the physical and
 natural world; provide scientific explanations of the nature of the universe, the earth, and/or life
 forms and be able to distinguish these explanations from non-scientific explanations.
- **College Algebra**: Students must pass this content area or earn a score of 75 or higher on a proctored ALEKS exam.
- Science, Technology and Society: Understand and reflect upon the complex issues raised by technological and scientific changes and its effects on society and the global world by making sense of, evaluating, and responding to present and future changes that shape individuals' work, public, and personal lives. Courses meeting this content area may focus on issues such as global warming; biotechnology; GMO foods; and computing and information science as it relates to security, privacy, and the proliferation of global information. Consideration should be given to scientific and technological changes from fields such as agriculture, computer science, engineering, education, health sciences, etc.
- 5. **Human Cultures** -- the ability to recognize one's own cultural traditions and to understand and appreciate other cultural traditions and languages.

Key skills:

- Discuss history and the basic principles and operation of government with a view to being a
 responsible citizen; discuss economic, social, and cultural diversity within a global context; describe
 the cultural, social and historical dynamics that influence individuals and groups; explain the
 perspective of the culture of another country through the study of world languages, arts, spiritual
 traditions, mythology/literature, and/or through study abroad
- **Humanities**: Includes content in classics, history, languages, the law, literature, the performing arts, philosophy (including ethics), religion, and visual arts.
- **Behavioral/Social Sciences**: Includes content in anthropology, psychology, cognitive science, organization theory, sociology, economics, history, counseling, political science.

Embedded Learning Outcomes

1. Communication – Students graduating from Purdue should be able to communicate, orally and in writing, in ways appropriate to their fields of study and future careers. Effective communication is founded on information literacy, which involves the ability to use appropriate information to learn and explore ideas, demonstrate understanding of a subject, and convey one's conclusions. At the embedded outcome level, effective communication assumes basic fluency with such things as grammar, organization and structure. It also focuses on being able to convey ideas concisely in ways appropriate for the context, audience and purpose. At this level, students should recognize that communication occurs within and across communities, such as academic, public or professional, where ideas are formulated, debated, and weighed against one another.

Key outcomes may include:

- Demonstrates successful execution of organization, content, presentation, format and stylistic choices through appropriate genres of written or oral communication.
- Demonstrates the ability to critically evaluate, select, analyze and synthesize relevant information sources for communicative purposes.

- Demonstrates the ability to select and successfully convey ideas through modes of communication appropriate for specific purposes and audiences, which may include an essay, report, scientific poster, video, social media, etc.
- Engages with and uses information sources to communicate that are in accord with ethical standards and legal requirements, such as giving credit to the original ideas of others through proper attribution and citation.
- 2. Ways of Thinking -- Success in life requires the ability to think critically, practically, and creatively within an ethical framework. Critical thinking is the process of gathering information, analyzing it in various ways including quantitative and qualitative methods, and evaluating it for the purpose of solving a problem or making a decision. Practical thinking is the ability to adapt to changing environmental conditions and to shape the environment so as to produce the desired results. Creative thinking is the ability to generate novel ideas that can lead to change. It is essential that the ethical implications of actions that result from these thought processes are carefully considered.

Key outcomes may include:

- Demonstrates the ability to gather, analyze and evaluate information.
- Connects disparate pieces of information to infer relationships.
- Demonstrates open-mindedness and flexibility in expression, decision making, and problem solving.
- Applies knowledge and skills previously learned to new circumstances.
- Considers multiple possible explanation or solutions rather than one.
- Accepts mistakes and learns from them.
- Acts in a fair and thoughtful manner.
- 3. Interpersonal Skills and Intercultural Knowledge -- Students graduating from Purdue University should be able to work effectively with others in various ways including in cross-cultural situations and in a global civil society. Interpersonal skills include the ability to work effectively with others both in professional practice and in relating to those outside of the discipline, in leadership roles, and as members of a team. Intercultural knowledge is founded on the ability to appreciate and critique multiple perspectives including one's own and to engage in civil discourse on complex global issues. It requires respect for and responsiveness to the beliefs and practices and cultural and linguistic needs of diverse populations. Students can acquire and practice these skills in ways appropriate to their fields of study and future careers.

Key outcomes may include:

- Demonstrates the ability to work with others in leadership and/or team roles in professional practice and in relating to the public.
- Demonstrates understanding of diverse populations in relation to history, values, politics, communication styles, economy, or beliefs and practices.
- Demonstrates understanding of the rights and obligations that students have as citizens in communities, nations and the world.
- Demonstrates interpersonal skills and intercultural knowledge in discipline-specific ways, which may
 include but are not limited to courses, study abroad, internships, community service, fieldwork,
 undergraduate research, capstone projects, student teaching, performances and exhibitions, and
 honors theses.

Appendix B

Learning Outcome Rubrics

Faculty within each program area will be responsible for determining where and at what level embedded outcomes will be met within their programs. In addition, program area faculty will be solely responsible for assessing student learning on embedded outcomes within their courses Rubrics developed by the Association of American Colleges and Universities (AACU) and adapted for use at Purdue can assist faculty in assessing core learning outcomes.

CREATIVE THINKINGRUBRIC

Definition

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 innovationand divergent thinking.

	Proficient	Emerging	Developing
	3	2	1
Acquiring Competencies	Reflect: Evaluates creative process and	Create: Creates an entirely new object,	Adapt: Successfully adaptsan appropriate
This step refers to acquiring strategies and skills within a particular domain.	product using domain-appropriate criteria.	solution or idea that is appropriate to the domain.	exemplar to his/her own specifications.
Taking Risks	Actively seeks out and follows through on	Incorporates new directions or approaches	Considers new directions or approaches
May include personal risk (fear of embarrassment or rejection) or risk of failure in successfully completing assignment, i.e. going beyond original parameters of assignment, introducing new materials and forms, tackling controversial topics, advocating unpopular ideas or solutions.	untested and potentially risky directions or approaches to the assignment in the final product.	to the assignment in the final product.	without going beyond the guidelines of the assignment.
Solving Problems	Not only develops a logical, consistent plan to solve problem, but recognizes consequences of solution and can articulate reason for choosing solution.	Having selected from among alternatives, develops a logical, consistent plan to solve the problem.	Considers and rejects less acceptable approaches to solving problem.
Embracing Contradictions	Integrates alternate, divergent, or contradictory perspectives or ideas fully.	Incorporates alternate, divergent, or contradictory perspectives or ideas in an exploratory way.	Includes (recognizes the value of) alternate, divergent, or contradictory perspectives or ideas in a small way.
Innovative Thinking	Extends a novel or unique idea, question,	Creates a novel or unique idea, question,	Experiments with creating a novel or unique
Novelty or uniqueness (of idea, claim, question, form, etc.)	format, or product to create new knowledge or knowledge that crosses boundaries.	format, or product.	idea, question, format, or product.
Connecting, Synthesizing, Transforming	Transforms ideas or solutions into entirely new forms.	Synthesizes ideas or solutions into a coherent whole.	Connects ideas or solutions in novel ways.

CRITICAL THINKINGRUBRIC

Definition

"...mode of thinking about any subject, content, or problem in which the thinker improves the quality of his or her thinking by skillfully taking charge of the structures inherent in thinking and imposing intellectual standards upon them." It is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before

accepting or formulating an opinion or conclusion.

	Proficient	Emerging	Developing
	3	2	1
Explanation of issues	Issue/problem to be considered critically is stated clearly and described comprehensively, delivering all relevant information necessary for full understanding.	Issue/problem to be considered critically is stated, described, and clarified so that understanding is not seriously impeded by omissions.	Issue/problem to be considered critically is stated but description leaves some terms undefined, ambiguities unexplored, boundaries undetermined, and/or backgrounds unknown.
Evidence Selecting and using information to investigate a point of view or conclusion	Information is taken from source(s) with enough interpretation/evaluation to develop a comprehensive analysis or synthesis. Viewpoints of experts are questioned thoroughly.	Information is taken from source(s) with enough interpretation/evaluation to develop a coherent analysis or synthesis. Viewpoints of experts are subject to questioning.	Information is taken from source(s) with some interpretation/evaluation, but not enough to develop a coherent analysis or synthesis. Viewpoints of experts are taken as mostly fact, with little questioning.
Influence of context and assumptions	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).
Student's position (perspective, thesis/hypothesis)	Specific position (perspective, thesis/hypothesis) is imaginative, taking into account the complexities of an issue. Limits of position (perspective, thesis/hypothesis) are acknowledged. Others' points of view are synthesized within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) takes into account the complexities of an issue. Others' points of view are acknowledged within position (perspective, thesis/hypothesis).	Specific position (perspective, thesis/hypothesis) acknowledges different sides of an issue.
Conclusions and related outcomes (implications and consequences)	Conclusions and related outcomes (consequences and implications) are logical and reflect student's informed evaluation and ability to place evidence and perspectives discussed in priority order.	Conclusion is logically tied to a range of information, including opposing viewpoints; related outcomes (consequences and implications) are identified clearly.	Conclusion is logically tied to information (because information is chosen to fit the desired conclusion); some related outcomes (consequences and implications) are identified clearly.

ETHICAL REASONINGRUBRIC

Definition

Ethical Reasoning is reasoning about right and wrong human conduct. It requires students to be able to assess their own ethical values and the social context of problems, recognize ethical issues in a variety of settings, think about how different ethical perspectives might be applied to ethical dilemmas, and consider the ramifications of alternative actions.

Students' ethical self-identity evolves as they practice ethical decision-making skills and learn how to describe and analyze positions on ethical issues.

·	Proficient	Emerging	Developing
	3	2	1
Ethical Self-Awareness	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs and discussion has greater depth and clarity.	Student discusses in detail/analyzes both core beliefs and the origins of the core beliefs.	Student states both core beliefs and the origins of the core beliefs.
Understanding Different Ethical Perspectives/Concepts	Student names the theory or theories, can present the gist of said theory or theories, and accurately explains the details of the theory or theories used.	Student can name the major theory or theories she/he uses, can present the gist of said theory or theories, and attempts to explain the details of the theory or theories used, but has some inaccuracies.	Student can name the major theory she/he uses, and is only able to present the gist of the named theory.
Ethical Issue Recognition	Student can recognize ethical issues when presented in a complex, multilayered (gray) context AND can recognize cross-relationships among the issues.	Student can recognize ethical issues when issues are presented in a complex, multilayered (gray) context OR can grasp cross-relationships among the issues.	Student can recognize basic and obvious ethical issues and grasp (incompletely) the complexities or interrelationships among the issues.
Application of Ethical Perspectives/Concepts	Student can independently apply ethical perspectives/concepts to an ethical question, accurately, and is able to consider full implications of the application.	Student can independently apply ethical perspectives/concepts to an ethical question, accurately, but does not consider the specific implications of the application.	Student can apply ethical perspectives/concepts to an ethical question, independently (to a new example) and the application is inaccurate.
Evaluation of Different Ethical Perspectives/Concepts	Student states a position and can state the objections to, assumptions and implications of and can reasonably defend against the objections to, assumptions and implications of different ethical perspectives/concepts, and the student's defense is adequate and effective.	Student states a position and can state the objections to, assumptions and implications of, and respond to the objections to, assumptions and implications of different ethical perspectives/concepts, but the student's response is inadequate.	Student states a position and can state the objections to, assumptions and implications of different ethical perspectives/concepts but does not respond to them (and ultimately objections, assumptions, and implications are compartmentalized by student and do not affect student's position.)

GLOBAL CITIZENSHIP/SOCIAL AWARENESSRUBRIC

Definition

Global citizenship and social awareness is civil discourse on complex issues, Ability to appreciate and critique multiple perspectives including one's own, Self-reflective examination of values, Self-reflective awareness of oneself as a global citizen, Ethical citizenship and leadership in a global civil society, Commitment to community service.

	Proficient 3	Emerging 2	Developing 1
Diversity of Communities and Cultures	Demonstrates evidence of adjustment in own attitudes and beliefs because of working within and learning from diversity of communities and cultures. Promotes others' engagement with diversity.	Reflects on how own attitudes and beliefs are different from those of other cultures and communities. Exhibits curiosity about what can be learned from diversity of communities and cultures.	Has awareness that own attitudes and beliefs are different from those of other cultures and communities. Exhibits little curiosity about what can be learned from diversity of communities and cultures.
Analysis of Knowledge	Connects and extends knowledge (facts, theories, etc.) from one's own academic study/field/discipline to global engagement and to one's own participation in civic life, politics, and government.	Analyzes knowledge (facts, theories, etc.) from one's own academic study/field/discipline making relevant connections to global engagement and to one's own participation in civic life, politics, and government.	Begins to connect knowledge (facts, theories, etc.) from one's own academic study/field/discipline to global engagement and to tone's own participation in civic life, politics, and government.
Identity and Commitment	Provides evidence of experience in civic- engagement activities and describes what she/he haslearned about her or himself as it relates to a reinforced and clarified sense of civic identity and continued commitment to public action.	Provides evidence of experience in civic- engagement activities and describes what she/he has learned about her or himself as it relates to a growing sense of civic identity and commitment.	Evidence suggests involvement in civic- engagement activities is generated from expectations or course requirements rather than from a sense of civic identity.
Communication	Tailors communication strategies to effectively express, listen, and adapt to others to establish relationships to further civic action	Effectively communicates in civic context, showing ability to do all of the following: express, listen, and adapt ideas and messages based on others' perspectives.	Communicates in civic context, showing ability to do more than one of the following: express, listen, and adapt ideas and messages based on others' perspectives.
Action and Reflection	Demonstrates independent experience and shows initiative in team leadership of complex or multiple civic engagement activities, accompanied by reflective insights or analysis about the aims and accomplishments of one's actions.	Demonstrates independent experience and <i>team leadership of</i> civic action, with reflective insights or analysis about the aims and accomplishments of one's actions.	Has clearly <i>participated</i> in civicallyfocused actions and begins to reflect or describe how these actions may benefit individual(s) or communities.

INFORMATION LITERACY RUBRIC

Definition

Information literacy is the ability to recognize the extent and nature of information need, then to locate, evaluate, and effectively use the needed information. It involves designing, evaluating and implementing a strategy to answer questions or achieve a desired goal

	Proficient 3	Emerging 2	Developing 1
Determine the Extent of Information Needed	Effectively defines the scope of the research question or thesis. Effectively determines key concepts. Types of information (sources) selected directly relate to concepts or answer research question.	Defines the scope of the research question or thesis completely. Can determine key concepts. Types of information (sources) selected relate to concepts or answer research question.	Defines the scope of the research question or thesis incompletely (parts are missing, remains too broad or too narrow, etc.). Can determine key concepts. Types of information (sources) selected partially relate to concepts or answer research question.
Access the Needed Information	Accesses information using effective, well-designed search strategies and most appropriate information sources.	Accesses information using variety of search strategies and some relevant information sources. Demonstrates ability to refine search.	Accesses information using simple search strategies, retrieves information from limited and similar sources.
Evaluate Information and its Sources Critically	Thoroughly (systematically and methodically) analyzes own and others' assumptions and carefully evaluates the relevance of contexts when presenting a position.	Identifies own and others' assumptions and several relevant contexts when presenting a position.	Questions some assumptions. Identifies several relevant contexts when presenting a position. May be more aware of others' assumptions than one's own (or vice versa).
Use Information Effectively to Accomplish a Specific Purpose	Communicates, organizes and synthesizes information from sources to fully achieve a specific purpose, with clarity and depth	Communicates, organizes and synthesizes information from sources. Intended purpose is achieved.	Communicates and organizes information from sources. The information is not yet synthesized, so the intended purpose is not fully achieved.
Access and Use Information Ethically and Legally	Students use correctly all of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrate a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly three of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.	Students use correctly two of the following information use strategies (use of citations and references; choice of paraphrasing, summary, or quoting; using information in ways that are true to original context; distinguishing between common knowledge and ideas requiring attribution) and demonstrates a full understanding of the ethical and legal restrictions on the use of published, confidential, and/or proprietary information.

INTEGRATIVE LEARNINGRUBRIC

Definition

Integrative learning is an understanding and a disposition that a student builds across the curriculum and cocurriculum, from making simple connections among ideas and experiences to synthesizing and transferring learning to new, complex situations within and beyond the campus.

	Proficient 3	Emerging 2	Developing 1
Connections to Experience Connects relevant experience and academic knowledge	Meaningfully synthesizes connections among experiences outside of the formal classroom (including life experiences and academic experiences such as internships and travel abroad) to deepen understanding of fields of study and to broaden own points of view.	Effectively selects and develops examples of life experiences, drawn from a variety of contexts (e.g., family life, artistic participation, civic involvement, work experience), to illuminate concepts/theories/frameworks of fields of study.	Compares life experiences and academic knowledge to infer differences, as well as similarities, and acknowledge perspectives other than own.
Connections to Discipline Sees (makes) connections across disciplines, perspectives	Independently creates wholes out of multiple parts (synthesizes) or draws conclusions by combining examples, facts, or theories from more than one field of study or perspective.	Independently connects examples, facts, or theories from more than one field of study or perspective.	When prompted, connects examples, facts, or theories from more than one field of study or perspective.
Transfer Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations	Adapts and applies, independently, skills, abilities, theories, or methodologies gained in one situation to new situations to solve difficult problems or explore complex issues in original ways.	Adapts and applies skills, abilities, theories, or methodologies gained in one situation to new situations to solve problems or explore issues.	Uses skills, abilities, theories, or methodologies gained in one situation in a new situation to contribute to understanding of problems or issues.
Integrated Communication	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) in ways that enhance meaning, making clear the interdependence of language and meaning, thought, and expression.	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) to explicitly connect content and form, demonstrating awareness of purpose and audience.	Fulfills the assignment(s) by choosing a format, language, or graph (or other visual representation) that connects in a basic way what is being communicated (content) with how it is said (form).
Reflection and Self-Assessment Demonstrates a developing sense of self as a learner, building on prior experiences to respond to new and challenging contexts (may be evident in self-assessment, reflective, or creative work)	Envisions a future self (and possibly makes plans that build on past experiences that have occurred across multiple and diverse contexts).	Evaluates changes in own learning over time, recognizing complex contextual factors (e.g., works with ambiguity and risk, deals with frustration, considers ethical frameworks).	Articulates strengths and challenges (within specific performances or events) to increase effectiveness in different contexts (through increased self-awareness).

[•] Adapted from AAC&U Core Value Rubrics

INTERCULTURAL KNOWLEDGE AND EFFECTIVENESS RUBRIC

Definition

A set of behaviors, attitudes, and policies that come together to enable systems, agencies, or professionals to work effectively in cross-cultural situations.

	Proficient 3	Emerging 2	Developing 1
Knowledge Cultural self- awareness	Articulates insights into own cultural rules and biases (e.g. seeking complexity; aware of how her/his experiences have shaped these rules, and how to recognize and respond to cultural biases, resulting in a shift in self-description.)	Recognizes new perspectives about own cultural rules and biases (e.g. not looking for sameness; comfortable with the complexities that new perspectives offer.)	Identifies own cultural rules and biases (e.g. with a strong preference for those rules shared with own cultural group and seeks the same in others.)
Knowledge Knowledge of cultural worldview frameworks	Demonstrates sophisticated understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates adequate understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.	Demonstrates partial understanding of the complexity of elements important to members of another culture in relation to its history, values, politics, communication styles, economy, or beliefs and practices.
Skills Empathy	Interprets intercultural experience from the perspectives of own and more than one worldview and demonstrates ability to act in a supportive manner that recognizes the feelings of another cultural group.	Recognizes intellectual and emotional dimensions of more than one worldview and sometimes uses more than one worldview in interactions.	Identifies components of other cultural perspectives but responds in all situations with own worldview.
Skills Verbal and nonverbal communication	Articulates a complex understanding of cultural differences in verbal and nonverbal communication (e.g., demonstrates understanding of the degree to which people use physical contact while communicating in different cultures or use direct/indirect and explicit/implicit meanings) and is able to skillfully negotiate a shared understanding based on those differences.	Recognizes and participates in cultural differences in verbal and nonverbal communication and begins to negotiate a shared understanding based on those differences.	Identifies some cultural differences in verbal and nonverbal communication and is aware that misunderstandings can occur based on those differences but is still unable to negotiate a shared understanding.
Attitudes Curiosity	Asks complex questions about other cultures, seeks out and articulates answers to these questions that reflect multiple cultural perspectives.	Asks deeper questions about other cultures and seeks out answers to these questions.	Asks simple or surface questions about other cultures.
Attitudes Openness	Initiates and develops interactions with culturally different others. Suspends judgment in valuing her/his interactions with culturally different others.	Begins to initiate and develop interactions with culturally different others. Begins to suspend judgment in valuing her/his interactions with culturally different others.	Expresses openness to most, if not all, interactions with culturally different others. Has difficulty suspending any judgment in her/his interactions with culturally different others, and is aware of own judgment and expresses a willingness to change.

LEADERSHIP AND TEAMWORK RUBRIC

Definition

Leadership and Teamwork are interpersonal skills and behaviors under the control of individuals and team members (effort they put into team tasks, their manner of interacting with others on team, and the quantity and quality of contributions they make to organizational and team discussions). The leader is one who practices management as a trainable skill with technical and administrative aspects which serve to direct people for the good of the enterprise. Leadership is the art and science of getting the job done through the willing efforts of others.

	Proficient 3	Emerging 2	Developing 1
Contributes to Team Meetings	Helps the team move forward by articulating the merits of alternative ideas or proposals.	Offers alternative solutions or courses of action that build on the ideas of others.	Offers new suggestions to advance the work of the group.
Facilitates the Contributions of Team Members	Engages team members in ways that facilitate their contributions to meetings by both constructively building upon or synthesizing the contributions of others as well as noticing when someone is not participating and inviting them to engage.	Engages team members in ways that facilitate their contributions to meetings by constructively building upon or synthesizing the contributions of others.	Engages team members in ways that facilitate their contributions to meetings by restating the views of other team members and/or asking questions for clarification.
Individual Contributions Outside of Team Meetings	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project. Proactively helps other team members complete their assigned tasks to a similar level of excellence.	Completes all assigned tasks by deadline; work accomplished is thorough, comprehensive, and advances the project.	Completes all assigned tasks by deadline; work accomplished advances the project.
Fosters Constructive Team Climate	Supports a constructive team climate by doing all of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team anditswork. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any three of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.	Supports a constructive team climate by doing any two of the following: • Treats team members respectfully by being polite and constructive in communication. • Uses positive vocal or written tone, facial expressions, and/or body language to convey a positive attitude about the team and its work. • Motivates teammates by expressing confidence about the importance of the task and the team's ability to accomplish it. • Provides assistance and/or encouragement to team members.
Responds to Conflict	Addresses destructive conflict directly and constructively, helping to manage/resolve it in a way that strengthens overall team cohesiveness and future effectiveness.	Identifies and acknowledges conflict and stays engaged with it.	Redirecting focus toward common ground, toward task at hand (away from conflict).

ORAL COMMUNICATION RUBRIC

Definition

Activity of conveying meaningful information verbally; communication by word of mouthtypically relies on words, visual aids and non-verbal elements to support the conveyance of the meaning. Oral communication is designed to increase knowledge, foster understanding, or to promote change in the listener's attitudes, values, beliefs, or behaviors.

	Proficient 3	Emerging 2	Developing 1
Organization	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable and is skillful and makes the content of the presentation cohesive.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is clearly and consistently observable within the presentation.	Organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) is intermittently observable within the presentation.
Language	Language choices are imaginative, memorable, and compelling, and enhance the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are thoughtful and generally support the effectiveness of the presentation. Language in presentation is appropriate to audience.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Language in presentation is appropriate to audience.
Delivery	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation compelling, and speaker appears polished and confident.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation interesting, and speaker appears comfortable.	Delivery techniques (posture, gesture, eye contact, and vocal expressiveness) make the presentation understandable, and speaker appears tentative.
Supporting Material	A variety of types of supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that significantly supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that generally supports the presentation or establishes the presenter's credibility/authority on the topic.	Supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) make appropriate reference to information or analysis that partially supports the presentation or establishes the presenter's credibility/authority on the topic.
Central Message	Central message is compelling (precisely stated, appropriately repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is basically understandable but is not often repeated and is not memorable.

QUANTITATIVE REASONING RUBRIC

Definition

Quantitative Reasoning -is knowledge of and confidence with basic mathematical/analytical concepts and operations required for problem-solving,

decision-making, economic productivity and real-world applications.

	Proficient 3	Emerging 2	Developing 1
Interpretation Ability to explain information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words)	Provides accurate explanations of information presented in mathematical forms. Makes appropriate inferences based on that information. For example, accurately explains the trend data shown in a graph and makes reasonable predictions regarding what the data suggest about future events.	Provides accurate explanations of information presented in mathematical forms. For instance, accurately explains the trend data shown in a graph.	Provides somewhat accurate explanations of information presented in mathematical forms, but occasionally makes minor errors related to computations or units. For instance, accurately explains trend data shown in a graph, but may miscalculate the slope of the trend line.
Representation Ability to convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words)	Skillfully converts relevant information into an insightful mathematical portrayal in a way that contributes to a further or deeper understanding.	Competently converts relevant information into an appropriate and desired mathematical portrayal.	Completes conversion of information but resulting mathematical portrayal is only partially appropriate or accurate.
Calculation	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem. Calculations are also presented elegantly (clearly, concisely, etc.)	Calculations attempted are essentially all successful and sufficiently comprehensive to solve the problem.	Calculations attempted are either unsuccessful or represent only a portion of the calculations required to comprehensively solve the problem.
Application / Analysis Ability to make judgments and draw appropriate conclusions based on the quantitative analysis of data, while recognizing the limits of this analysis	Uses the quantitative analysis of data as the basis for deep and thoughtful judgments, drawing insightful, carefully qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for competent judgments, drawing reasonable and appropriately qualified conclusions from this work.	Uses the quantitative analysis of data as the basis for workmanlike (without inspiration or nuance, ordinary) judgments, drawing plausible conclusions from this work.
Assumptions Ability to make and evaluate important assumptions in estimation, modeling, and data analysis	Explicitly describes assumptions and provides compelling rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions.	Explicitly describes assumptions and provides compelling rationale for why assumptions are appropriate.	Explicitly describes assumptions.
Communication Expressing quantitative evidence in support of the argument or purpose of the work (in terms of what evidence is used and how it is formatted, presented, and contextualized)	Uses quantitative information in connection with the argument or purpose of the work, presents it in an effective format, and explicates it with consistently high quality.	Uses quantitative information in connection with the argument or purpose of the work, though data may be presented in a less than completely effective format or some parts of the explication may be uneven.	Uses quantitative information, but does not effectively connect it to the argument or purpose of the work.

WRITTEN COMMUNICATION RUBRIC

Definition

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

	Proficient 3	Emerging 2	Developing 1
Context of and Purpose for Writing Includes considerations of audience, purpose, and the circumstances surrounding the writing task(s).	Demonstrates a thorough understanding of context, audience, and purpose that is responsive to the assigned task(s) and focuses all elements of the work.	Demonstrates adequate consideration of context, audience, and purpose and a clear focus on the assigned task(s) (e.g., the task aligns with audience, purpose, and context).	Demonstrates awareness of context, audience, purpose, and to the assigned tasks(s) (e.g., begins to show awareness of audience's perceptions and assumptions).
Content Development	Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer's understanding, and shaping the whole work.	Uses appropriate, relevant, and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work.
Genre and Disciplinary Conventions Formal and informal rules inherent in the expectations for writing in particular forms and/or academic fields (please see glossary).	Demonstrates detailed attention to and successful execution of a wide range of conventions particular to a specific discipline and/or writing task (s) including organization, content, presentation, formatting, and stylistic choices	Demonstrates consistent use of important conventions particular to a specific discipline and/or writing task(s), including organization, content, presentation, and stylistic choices	Follows expectations appropriate to a specific discipline and/or writing task(s) for basic organization, content, and presentation
Sources and Evidence	Demonstrates skillful use of high- quality, credible, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing.	Demonstrates an attempt to use credible and/or relevant sources to support ideas that are appropriate for the discipline and genre of the writing.
Control of Syntax and Mechanics	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, and is virtually error-free.	Uses straightforward language that generally conveys meaning to readers. The language in the portfolio has few errors.	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.