Data Fluency is an understanding of methodologies used to collect and process data coupled with the ability to comprehend and communicate evidence-based decisions.

	Capstone	Milestones	Milestone	Benchmark 1
Data identification or collection	Successfully accomplishes the task by selecting appropriate data sources or collecting data through careful consideration of several factors that may include relevance, currency, authority, availability, completion, and bias or point of view. Submitted work successfully demonstrates an awareness of alternative approaches.	Demonstrates capability in selecting appropriate data sources or collecting data through consideration of multiple factors that may include relevance, currency, availability, and completion.	Demonstrates a basic understanding of data identification or collection process through consideration of basic factors that may include relevance and currency.	Demonstrates some awareness of the data identification or collection process by utilizing limited factors some of which may not be relevant.
Summarize data	Successfully accomplishes the summarization of the dataset in a comprehensive and informative manner that may include comparing different groups and variables, finding patterns, trends, and anomalies.	Demonstrates capability in summarizing the dataset in an informative manner that may include comparing different groups and variables and finding common patterns and trends.	Demonstrates a basic understanding of summarization process in an informative manner that may include comparing different groups and variables.	Demonstrates some awareness of the summarization process in an informative manner but may include errors in the comparison of different groups and variables.
Evaluate data	Successfully accomplishes deep and thoughtful evaluation, drawing evidence-based and impactful conclusions based on the summarization of data	Demonstrates capability in evaluating and drawing conclusions based on evidence from the summarization of data	Demonstrates basic understanding of the evaluation of data and drawing conclusions based on the summarization of the data.	Demonstrates some awareness of evaluation of data but may include errors when drawing conclusions from this work based on the summarization of data.
Communicate data	Successfully accomplishes communicating data in a manner appropriate to the discipline through the utilization of data storytelling (narrative) and/or visualization (graph, chart, infographic, dashboard, etc.) tools to effectively communicate all aspects of the data in a manner that is accessible to a wide audience.	Demonstrates capability appropriate to the discipline in communicating data through the utilization of data storytelling (narrative) and/or visualization (graph, chart, infographic, dashboard, etc.) tools to communicate most aspects of the data.	Demonstrates basic understanding appropriate to the discipline in communicating data through the utilization of data storytelling (narrative) and/or visualization (graph, chart, infographic, dashboard, etc.) tools to communicate some aspects of the data.	Demonstrates some awareness appropriate to the discipline in communicating data. Attempts to communicate data or findings using basic techniques appropriate to the discipline but may not be entirely successful, and may struggle with tools (charts, graphs, etc.).

The <u>awareness level of competence</u> presents itself as an attempt to engage with the specified activity and its terminology. The work will contain errors or lack connection to the concepts/skills necessary to satisfactorily complete the relevant tasks without intervention. A <u>basic understanding level of competence</u> is demonstrated through some knowledge of the specified activity and its terminology and concepts. Student work will present some experience of doing the activity and will be able to carry out straightforward relevant tasks to the required standard under supervision. A <u>capable level of competence</u> is shown through demonstration of the knowledge and experience to carry out standard relevant tasks confidently and consistently without supervision. Students may even supervise others. However, they are likely to need to seek advice before carrying out more complex or non-standard tasks. The <u>accomplished level of competence</u> demonstrates the knowledge and experience to carry out complex, specialist, or non-standard tasks confidently and consistently. Students will be aware of alternative approaches and can provide guidance, instruction, and advice on the activity to others. (adapted from <a href="https://cieem.net/i-am/continuing-professional-development/competency-framework/the-different-levels-of-competence/#:~:text=A%20consistent%20level%20achievement,%2C%20Capable%2C%20Accomplished%20and%20Authoritative).

Winston Salem State University Oral Communication Rubric for General Education

Use appropriate language, conventions, elocution, poise, organization, supporting evidence, and content to effectively communicate through the spoken word for the purpose and audience.

	Capstone (4)	Milestone (3)	Benchmark (2)	Baseline (1)
Context / Audience/ Medium	Speaker skillfully adapts style and message to the context (e.g. public speaking, interpersonal, small group and teams) and consistently demonstrates respect and sensitivity diverse audiences	Speaker adapts to the context (e.g., public speaking, interpersonal, small group and teams) and demonstrates respect and sensitivity for diverse audiences	Speaker attempts to adapt to the context (e.g. public speaking, interpersonal, small group and teams) and inconsistently demonstrates respect and sensitivity for diverse audiences	Speaker fails to adapt to the context (e.g., public speaking, interpersonal, small group and teams); and demonstrates some cultural bias and is insensitive to the needs of a diverse audience
Organization	Organizational pattern is clearly and consistently observable, well structured, and makes the content of the message cohesive	Organizational pattern is observable within the message	Organizational pattern is attempted within the message	Organizational pattern is not observable within the message
Delivery	Speaker consistently demonstrates mastery of delivery techniques and appears polished and confident	Speaker demonstrates mastery of delivery techniques and appears comfortable	Speaker demonstrates some mastery of delivery techniques and appears hesitant	Speaker fails to demonstrate mastery of delivery techniques and appears uncomfortable
Language	Language choices are imaginative, memorable, compelling, and appropriate and enhance the effectiveness of the message	Language choices are thoughtful, appropriate, and generally support the effectiveness of the message	Language choices are mundane and commonplace and partially support the effectiveness of the message	Language choices are unclear, inappropriate to the audience and minimally support the effectiveness of the message
Supporting Materials	Provides a variety of supporting material and makes appropriate reference to information or analysis that significantly supports the message or establishes the speaker's credibility/authority on the topic	Provides supporting material and makes appropriate reference to information or analysis that generally supports the message or establishes the speaker's credibility/authority on the topic	Occasionally provides supporting materials and makes reference to information or analysis that supports the message or establishes the speaker's credibility/authority on the topic	Fails to provide supporting materials or make reference to information that supports the message or establishes the speaker's credibility/authority on the topic
Central Message	Central message is compelling 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	Central message is not explicitly stated or understandable

Based on Values Rubrics value@aacu.org (Rhodes, Terrel, ed. 2010. Assessing Outcomes and Improving Achievement: Tips and Tools for Using Rubrics. Washington, DC: Association of American Colleges and Universities).

WSSU PROBLEM SOLVING VALUE RUBRIC

Definition: Problem solving is the process of designing, evaluating, and implementing a strategy to answer an open-ended question or achieve a desired goal.

	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
	Constructs a clear and insightful problem statement with evidence of all relevant contextual factors.	Constructs a problem statement with evidence of most relevant contextual factors, and problem statement is adequately detailed.	Begins to construct a problem statement with evidence of most relevant contextual factors, but problem statement is superficial.	Demonstrates a limited ability in identifying a problem statement or related contextual factors.
Solutions/Hypotheses	Proposes one or more solutions/hypotheses that indicates a deep comprehension of the problem. Solution/hypotheses are sensitive to all relevant contextual factors.	Proposes one or more solutions/hypotheses that indicate comprehension of the problem. Solutions/hypotheses are sensitive to some contextual factors.	Proposes one solution/hypothesis that broadly rather than individually addresses the specific contextual factors of the problem.	Proposes a solution/hypothesis that is vague or only indirectly addresses the problem statement.
Evaluate Potential Solutions	Evaluates solutions thoroughly (for example, contains insightful explanation) and includes critical consideration of all appropriate contextual factors.	Evaluates solutions adequately (for example, contains thorough explanation) and includes strong consideration of most contextual factors.	Evaluates solutions briefly (for example, explanation lacks depth) and includes some consideration of relevant contextual factors.	Evaluates solutions superficially (for example, contains cursory, surface level explanation) and includes minimal consideration of relevant contextual factors.
Implement Solution	Implements the solution in a manner that addresses thoroughly all relevant contextual factors of the problem.	Implements the solution in a manner that addresses one or more relevant contextual factors of the problem or addresses all factors but lacking depth.	Implements the solution in a manner that addresses the problem statement but ignores relevant contextual factors.	Implements the solution in a manner that does not directly address the problem statement.
Evaluate Outcomes	Reviews results relative to the problem demonstrating thorough understanding of using supporting evidence to reach a conclusion with specific considerations of need for further work.	Reviews results relative to the problem demonstrating good understanding of using supporting evidence to reach a conclusion with some consideration of need for further work.	Reviews results relative to the problem demonstrating basic understanding of using supporting evidence to reach a conclusion with little, if any, consideration of need for further work.	Reviews results superficially in terms of the problem demonstrating minimal understanding of using supporting evidence to reach a conclusion with no consideration of need for further work.

^{*}Adapted from the AAC&U Problem Solving VALUE rubric. Contextual factors are constraints (determinants) affecting the particular problem and can vary on relevance across fields. Some examples of contextual factors include (but are not limited to) logic, evidence, ethics, culture, economics, attitudes (biases), accessibility, data availability, resources, historical perspectives, and limits. This rubric leaves determination of which factors are relevant to the professor leading the course, and ideally assignments should note which factors apply to the problem being presented.

Winston-Salem State University Written Communication General Education Rubric

	Capstone (4)	Milestone (3)	Benchmark (2)	Baseline (1)
Focus/Purpose	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, and purpose, and to the assigned task(s) (e.g., begins to show awareness of audience's perceptions and assumptions)	Demonstrates minimal attention to context, audience, and purpose, and to the assigned task(s) (e.g., expectation of instructor or self as audience)
Content and Support	Uses substantial, specific, and/or illustrative content with sophisticated ideas that are particularly well-developed and supported by high-quality credible and relevant evidence	Uses sufficient and appropriate content to explore ideas that are well-developed and supported by credible and relevant evidence	Uses appropriate content to develop and explore some key concepts through most of the work and demonstrates an attempt to use suitable sources	Uses some appropriate content to develop simple ideas in some parts of the work and demonstrates an attempt to use sources to support these ideas
Organization and Disciplinary Conventions	Structure is logical and coherent, making insightful connections among ideas and demonstrating detailed attention to and successful execution of discipline-specific conventions concerning organization and presentation	Structure is logical and coherent, clearly making connections among ideas and demonstrating consistent use of discipline-specific conventions concerning organization and presentation	Structure is generally clear and follows discipline-specific expectations concerning organization and presentation	Attempts to use a consistent system for basic organization and presentation of ideas
Language and Style	Exhibits skillful use of language, appropriate vocabulary, and variety in sentence structure	Exhibits adequate use of language, appropriate vocabulary, and some variety in sentence structure	Use of language is inconsistent, with limited vocabulary and little variety in sentence structure	Use of language and vocabulary are limited and demonstrates frequent problems in sentence structure
Mechanics and Usage	Is free of most errors in grammar and mechanics	Shows control of grammar and mechanics with limited errors	Uses writing mechanics that generally convey clarity although there are errors in usage	Meaning may be impeded because of errors in usage and mechanics