

Montgomery College General Education Assessment Rubric: Personal, Social and Civic Responsibility

The following rubric only reflects the elements of Personal, Social and Civic responsibility that are applicable to the HE discipline. This rubric does not reflect the full definition or range of standards or measures for Personal, Social and Civic Responsibility.

Personal, Social and Civic Responsibility includes the skills and awareness necessary to live as responsible, ethical, and contributing citizens of the community, state, nation, and world.

| Standard 1- Connection with Course Content: Student can demonstrate a personal connection with course content. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|---|--|---|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Displays an ability to independently form and clearly articulate personal connections with course content. | <input type="checkbox"/> Displays, with limited instructor support, a moderate ability to form and articulate connections with course content. | <input type="checkbox"/> Displays a limited ability to form and articulate connections with course content. <input type="checkbox"/> May reflect superficial or simplistic connections | <input type="checkbox"/> Is unable to form or articulate an independent or original connection with course content. | |

| Standard 2- Connection between individual and community: Student can express the connection between the individual and the community. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|---|--|---|--|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Working independently, is able to clearly articulate a sophisticated understanding of the connection between the individual and the community. | <input type="checkbox"/> Working with limited instructor support, is able to articulate a moderate understanding of the connection between the individual and the community. | <input type="checkbox"/> Displays a limited ability to articulate an understanding of the connection between the individual and the community. <input type="checkbox"/> Displays a simplistic or superficial awareness of the connection between the individual and the community. | <input type="checkbox"/> Does not demonstrate an understanding of the connection between the individual and the community. | |

| Standard 3- Connection between behavior and consequences: Student can demonstrate an awareness of the connection between behavior and consequences. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|--|--|--|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Demonstrates a sophisticated awareness, with a high degree of independence, of the connections between behavior and consequences. | <input type="checkbox"/> Demonstrates, with limited instructor support, a moderate awareness of the connections between behavior and consequences. | <input type="checkbox"/> Demonstrates a limited awareness of the connections between behavior and consequences. <input type="checkbox"/> Displays superficial or simplistic thinking relating to connections between individual behaviors and consequences. | <input type="checkbox"/> Does not display an awareness of the connections between behavior and consequences or may display an inaccurate connection between behaviors and consequences. | |

Montgomery College General Education Assessment Rubric: Quantitative Reasoning

Montgomery College's Scientific and Quantitative Reasoning Rubric is based on the Scientific Method of Inquiry, Advancing Assessment of Quantitative and Scientific Reasoning, Numeracy, 3 (2): Article 2 by Sundre, Donna L. and Amy D. Theik. 2010, and adapted from the College of Marin Common Scientific and Quantitative Reasoning Rubric, and the Association of American Colleges and Universities' Quantitative Literacy VALUE Rubric.

Quantitative Reasoning includes the ability to interpret and represent data; perform mathematical calculations and carry out an analysis with clear assumptions; and finally communicate results appropriately.

| Standard 1 Interpretation And Representation: The student is able to interpret and represent mathematically the data provided. | | | | |
|---|--|--|--|---|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | Not Applicable |
| <ul style="list-style-type: none"> <input type="checkbox"/> Provides accurate explanations of information presented in mathematical form. <input type="checkbox"/> Makes appropriate inferences based on that information. <input type="checkbox"/> Converts relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. | <ul style="list-style-type: none"> <input type="checkbox"/> Provides mostly accurate explanations of information presented in mathematical form. <input type="checkbox"/> Makes mostly appropriate inferences based on that information. <input type="checkbox"/> Mostly converts relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. | <ul style="list-style-type: none"> <input type="checkbox"/> Provides inaccurate explanations of information presented in mathematical form. <input type="checkbox"/> Does not makes appropriate inferences based on that information. <input type="checkbox"/> Does not convert relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. | <ul style="list-style-type: none"> <input type="checkbox"/> Does not provide explanations of information presented in mathematical form. <input type="checkbox"/> Does not make appropriate inferences based on that information. <input type="checkbox"/> Does not convert relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. | <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |

| Standard 2 Calculation, Analysis and Assumptions: The student is able to perform mathematical calculations and perform an analysis with clear assumptions | | | | |
|---|--|--|---|---|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | Not Applicable |
| <ul style="list-style-type: none"> <input type="checkbox"/> Performs accurate calculations which are sufficiently comprehensive to solve the problem. <input type="checkbox"/> Uses correct and complete quantitative analysis. <input type="checkbox"/> Makes relevant and correct conclusions. <input type="checkbox"/> Explicitly describes assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Performs mostly accurate calculations which are sufficiently comprehensive to solve the problem. <input type="checkbox"/> Uses mostly correct and complete quantitative analysis. <input type="checkbox"/> Makes mostly relevant and correct conclusions. <input type="checkbox"/> Somewhat explicitly describes assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Mostly Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Performs inaccurate calculations which are insufficiently comprehensive to solve the problem. <input type="checkbox"/> Uses incorrect and complete quantitative analysis. <input type="checkbox"/> Make irrelevant and correct conclusions. <input type="checkbox"/> Vaguely describe assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Shows minimal awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Does not perform accurate calculations. <input type="checkbox"/> Does not uses correct and complete quantitative analysis. <input type="checkbox"/> Does not make relevant and correct conclusions. <input type="checkbox"/> Does not explicitly describe assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Does not shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |

| |
|--|
| Standard 3 Communication: The student is able to communicate results appropriately. |
|--|

| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | Not Applicable |
|--|---|---|---|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Presents work in an effective format, and explicates it with high quality. <input type="checkbox"/> Uses quantitative information in connection with the argument or purpose of the work | <ul style="list-style-type: none"> <input type="checkbox"/> Mostly presents work in an effective format, and explicates it with high quality. <input type="checkbox"/> Mostly uses quantitative information in connection with the argument or purpose of the work. | <ul style="list-style-type: none"> <input type="checkbox"/> Ineffectively presents work, and mostly below standard quality. <input type="checkbox"/> Rarely uses quantitative information in connection with the argument or purpose of the work. | <ul style="list-style-type: none"> <input type="checkbox"/> Does not present work in an effective format, and explicates it with high quality. <input type="checkbox"/> Does not use quantitative information in connection with the argument or purpose of the work. | <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |

Montgomery College General Education Assessment Rubric: Scientific Reasoning

Montgomery College's Scientific and Quantitative Reasoning Rubric is based on the Scientific Method of Inquiry, Advancing Assessment of Quantitative and Scientific Reasoning, *Numeracy*, 3 (2): Article 2 by Sundre, Donna L. and Amy D. Thelk. 2010, and adapted from the College of Marin Common Scientific and Quantitative Reasoning Rubric, and the Association of American Colleges and Universities' *Quantitative Literacy VALUE Rubric*.

Scientific and Quantitative reasoning: the ability to locate, identify, collect, organize, analyze, and interpret data and the ability to use mathematics and the scientific method of inquiry to make decisions, when appropriate.

| Standard 1 Problem Observation and Formulation of a Hypothesis | | | | |
|--|---|--|--|--|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Identifies relevant properties of the system under study. <input type="checkbox"/> Identifies the role of specific parts of relevant concepts and how they interact to create the outcome of the system. <input type="checkbox"/> Formulates hypotheses on the basis of observations. | <ul style="list-style-type: none"> <input type="checkbox"/> Identifies relevant properties of the system under study. <input type="checkbox"/> Identifies minimally the role of specific parts of relevant concepts and how they interact to create the outcome of the system. <input type="checkbox"/> Formulates weak hypotheses on the basis of observations. | <ul style="list-style-type: none"> <input type="checkbox"/> Mostly identifies relevant properties of the system under study. <input type="checkbox"/> Identifies minimally the role of specific parts of relevant concepts and how they interact to create the outcome of the system. <input type="checkbox"/> Formulates weak hypotheses on the basis of observations. | <ul style="list-style-type: none"> <input type="checkbox"/> Does not identify relevant properties of the system under study. <input type="checkbox"/> Does not identify the role of specific parts of relevant concepts and how they interact to create the outcome of the system. <input type="checkbox"/> Does not formulate hypotheses on the basis of observations. | <p>All Scientific Reasoning Assessment instruments must score this measure</p> |

| Standard 2 Experimentation and Collection of Data | | | | |
|---|---|--|---|--|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Formulates and carries out test of hypotheses employing appropriate techniques. <input type="checkbox"/> Method is documented completely and accurately, making experiment easy to reproduce. <input type="checkbox"/> Variables are identified and classified as dependent and independent. <input type="checkbox"/> Measurements are carried out using standard units of measurements and minimize sources of uncertainty. <input type="checkbox"/> Data is thoroughly and accurately recorded using identified tools. | <ul style="list-style-type: none"> <input type="checkbox"/> Formulates and carries out test of hypotheses employing appropriate techniques. <input type="checkbox"/> Method is mostly well documented. <input type="checkbox"/> Variables are mostly identified and classified as dependent and independent. <input type="checkbox"/> Measurements are mostly expressed using standard units of measurements and sources of uncertainty are mostly minimized. <input type="checkbox"/> Data is mostly thoroughly and accurately recorded using identified tools. | <ul style="list-style-type: none"> <input type="checkbox"/> Formulates and carries out test of hypotheses employing mostly appropriate techniques. <input type="checkbox"/> Method is not well documented making experiment difficult to reproduce. <input type="checkbox"/> Variables are not identified and classified as dependent and independent. <input type="checkbox"/> Measurements are not carried out using standard units of measurements and sources of uncertainty are not minimized. <input type="checkbox"/> Data is not thoroughly and accurately recorded using identified tools. | <ul style="list-style-type: none"> <input type="checkbox"/> Does not formulate and carry out test of hypotheses employing mostly appropriate techniques. <input type="checkbox"/> Method is not documented making experiment difficult to reproduce. <input type="checkbox"/> Variables are not identified and classified as dependent and independent. <input type="checkbox"/> Measurements are not carried out using standard units of measurements and sources of uncertainty are not minimized. <input type="checkbox"/> Data is not thoroughly and accurately recorded using identified tools. | <p>All Scientific Reasoning Assessment instruments must score this measure</p> |

| |
|--|
| Standard 3 Data Interpretation and Evaluation |
|--|

| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | All Scientific Reasoning Assessment instruments must score this measure |
|--|---|--|---|---|
| <ul style="list-style-type: none"> <input type="checkbox"/> Converts relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. <input type="checkbox"/> Uses correct and complete quantitative analysis. <input type="checkbox"/> Makes relevant and correct conclusions. <input type="checkbox"/> Explicitly describes assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Mostly converts relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. <input type="checkbox"/> Mostly uses correct and complete quantitative analysis. <input type="checkbox"/> Mostly makes relevant and correct conclusions. <input type="checkbox"/> Mostly describes assumptions and provides rationale for why each assumption is appropriate. Shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Minimally converts relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. <input type="checkbox"/> Uses incorrect and incomplete quantitative analysis. <input type="checkbox"/> Makes irrelevant and incorrect conclusions. <input type="checkbox"/> Minimally describes assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Partly shows awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | <ul style="list-style-type: none"> <input type="checkbox"/> Does not convert relevant information into an insightful mathematical portrayal in a way that contributes to a further and deeper understanding. <input type="checkbox"/> Does not use correct and complete quantitative analysis. <input type="checkbox"/> Does not make relevant and correct conclusions. <input type="checkbox"/> Does not describe assumptions and provides rationale for why each assumption is appropriate. <input type="checkbox"/> Does not show awareness that confidence in final conclusions is limited by the accuracy of the assumptions. | |

DRAFT

Montgomery College General Education Assessment Rubric: Arts and Aesthetic Awareness

Montgomery College's Arts and Aesthetic Awareness Rubric was developed with the input and support of a variety of representatives of ARTS distribution classes.

Arts and Aesthetic Awareness includes the skills and experiences that enable students to value, reflect upon, and appreciate the arts and role of arts in the human experience.

| Standard 1- Aesthetic Judgments: Student can demonstrate the ability to form aesthetic judgments about forms or examples of art. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|---|---|--|--|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Displays an ability to independently form and clearly articulate judgments about examples of art | <input type="checkbox"/> Displays, with limited instructor support, a moderate ability to form and articulate judgments about examples of art | <input type="checkbox"/> Displays a limited ability to form and articulate judgments about examples of art. <input type="checkbox"/> May reflect superficial or simplistic judgment | <input type="checkbox"/> Is unable to form or articulate an independent or original judgment about examples of art | |

| Standard 2- Creative Process: Student can express an appreciation and an understanding of the arts through a consideration of and/or engagement in the creative process. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|--|--|---|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Working independently, is able to clearly articulate a full appreciation and understanding of the arts through a consideration of and/or engagement in the creative process <input type="checkbox"/> Displays a sophisticated engagement in the creative process | <input type="checkbox"/> Working with limited instructor support, is able to articulate a moderate appreciation and understanding of the arts through a consideration of and/or engagement in the creative process | <input type="checkbox"/> Displays a limited ability to articulate an appreciation and understanding of the arts through a consideration of and/or engagement in the creative process. <input type="checkbox"/> Displays a simplistic or superficial engagement with the creative process | <input type="checkbox"/> Does not demonstrate an appreciation or understanding of the arts and/or an engagement in the creative process | |

| Standard 3- Role of Arts: Student can demonstrate an understanding of the role of the arts in the human experience | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|--|--|---|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Demonstrates the ability, with a high degree of independence, to fully understand and clearly articulate the relationship between works of art, the culture that created them, and their relevance to the larger human experience | <input type="checkbox"/> Demonstrates, with limited instructor support, a moderate understanding of, and ability to articulate, the relationship between works of art, the culture that created them, and their relevance to the larger human experience | <input type="checkbox"/> Demonstrates a limited understanding of, and limited ability to articulate, the relationship between works of art, the culture that created them, and their relevance to the larger human experience | <input type="checkbox"/> Does not display an understanding of the role of arts in the human experience. | |

| Standard 4- Terminology: Student can demonstrate an ability to understand and use the terminology relevant to the arts discipline. | | | | Not Applicable |
|---|--|---|--|--|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Demonstrates a high level of understanding through the correct usage of a full range of terminology relevant to the art discipline | <input type="checkbox"/> Demonstrates understanding through the generally correct usage of terminology relevant to the art discipline <input type="checkbox"/> May use a limited range of terms | <input type="checkbox"/> Demonstrates a limited understanding of the terminology relevant to the art discipline. Terms may be simply listed or used incorrectly | <input type="checkbox"/> Does not display an understanding of, or ability, to use terminology relevant to the art discipline | <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

Montgomery College General Education Assessment Rubric: Critical Analysis

Montgomery College's Critical Analysis and Reasoning Rubric is adapted from The Foundation for Critical Thinking's definitions and rubrics for critical thinking, Peter Falcione's *Holistic Critical Thinking Rubric*, Washington State University's *Critical Thinking Project*, and the Association of American Colleges and Universities' *Critical Thinking VALUE Rubric*.

Critical analysis and reasoning includes the application of higher order analytic and creative cognitive processes to arrive at reasoned and supportable conclusions, to synthesize and apply knowledge within and across courses and disciplines, and to develop creative solutions.

| Standard 1 Identification and Explanation of Issues: Student can understand and articulate a problem or a question, identify needed resources, and develop a response based on more than the his or her own ideas. | | | | |
|--|--|--|---|--|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Poses relevant, complex, and insightful questions <input type="checkbox"/> Accurately identifies and provides a well-developed summary of the problem or question including context <input type="checkbox"/> Identifies and uses appropriate sources which reflect a range of positions regarding the problem or question | <ul style="list-style-type: none"> <input type="checkbox"/> Poses appropriate questions <input type="checkbox"/> Identifies the problem or questions, but does not provide sufficient context <input type="checkbox"/> Identifies and uses a limited range of sources relating to the problem or question <input type="checkbox"/> Completes tasks with limited instructor support | <ul style="list-style-type: none"> <input type="checkbox"/> Poses a simplistic or tangentially related question. <input type="checkbox"/> Provides a limited explanation of the problem or context. <input type="checkbox"/> Represents the issues simplistically or inaccurately <input type="checkbox"/> Identifies limited sources and/or sources reflect bias or only one perspective on the issue. <input type="checkbox"/> Relies heavily on instructor guidance. | <ul style="list-style-type: none"> <input type="checkbox"/> Fails to pose an appropriate question <input type="checkbox"/> Does not identify or explain the problem or questions, and/or fails to summarize or explain the context <input type="checkbox"/> Represents the issues inaccurately <input type="checkbox"/> Does not identify appropriate sources and/or sources reflect bias or only one perspective on the issue. | All Critical Analysis and Reasoning Assessment instruments must score this measure |

| Standard 2 Analysis and Evaluation: Student can analyze and evaluate information and ideas, distinguishing between fact and opinion, considering relevance to the issue and validity of the source, and acknowledging a variety of viewpoints. | | | | |
|---|---|---|---|---|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Responds to sources impartially, with thoughtful analysis and evaluation of content and context <input type="checkbox"/> Demonstrates an advanced or sophisticated ability to analyze and evaluate information including distinguishing between fact and opinion and acknowledging alternative points of view <input type="checkbox"/> Recognizes and avoids logical fallacies <input type="checkbox"/> Justifies key results and procedures, explains assumptions and reasons. | <ul style="list-style-type: none"> <input type="checkbox"/> Responds to sources with analysis and evaluation of content and context <input type="checkbox"/> Demonstrates ability to analyze and evaluate information including distinguishing between fact and opinion and acknowledging alternative points of view, but analysis and evaluation may be superficial or flawed <input type="checkbox"/> Recognizes and avoids logical fallacies <input type="checkbox"/> May not provide a complete justification of results and procedures and/or does not fully explain assumptions and reasons <input type="checkbox"/> Completes tasks with limited instructor support | <ul style="list-style-type: none"> <input type="checkbox"/> Evaluation and analysis of sources is superficial and/or reflect bias <input type="checkbox"/> Recognizes and avoids major logical fallacies, with significant instructor guidance <input type="checkbox"/> Does not provide a completely justification of results and procedures and/or does not fully explain assumptions and reasons. <input type="checkbox"/> May rely heavily on instructor support/guidance | <ul style="list-style-type: none"> <input type="checkbox"/> Evaluation and analysis of sources is not provided, reflects bias or is inaccurate. <input type="checkbox"/> Does not identify or explain the problem or questions, and/or fails to summarize or explain the context <input type="checkbox"/> Represents the issues inaccurately <input type="checkbox"/> Does not identify appropriate sources and/or sources reflect bias or only one perspective on the issue. | All Critical Analysis and Reasoning Assessment instruments must score this measure. |

| | | | | |
|--|---|--|--|--|
| <p>Standard 3 Conclusions: Students can interpret information and develop sound conclusions including demonstrating some evidence of rethinking or refinement of ideas; interpreting information in the context of the question or problem; synthesizing ideas and/or making connections between ideas in sources, and recognizing the limits of their conclusions.</p> | | | | |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Takes risks by questioning sources and/or generates alternate or novel explanations supported by evidence as appropriate <input type="checkbox"/> Synthesizes ideas; makes connections or identifies connections within sources in an advanced way <input type="checkbox"/> Avoids oversimplification <input type="checkbox"/> Presents a thoughtful, nuanced, reasonable and factually accurate conclusion based on sound logic, information and evidence at hand <input type="checkbox"/> Demonstrates open-mindedness and self-awareness <input type="checkbox"/> Recognizes the limits of conclusions. | <ul style="list-style-type: none"> <input type="checkbox"/> Takes limited risks by questioning sources and/or generates alternate or novel explanations supported by evidence, as appropriate <input type="checkbox"/> Provides limited synthesis or ideas, may only summarize source information; makes few connections within sources <input type="checkbox"/> Generally avoids oversimplification <input type="checkbox"/> Presents reasonable and factually accurate conclusion based on sound logic, information and evidence at hand <input type="checkbox"/> Demonstrates some open-mindedness and self-awareness <input type="checkbox"/> Generally, recognizes the limits of conclusions | <ul style="list-style-type: none"> <input type="checkbox"/> Accepts sources without questioning <input type="checkbox"/> Summarizes sources information <input type="checkbox"/> Oversimplifies or ignores connections among sources <input type="checkbox"/> May only present a summary of sources <input type="checkbox"/> Conclusion may be simplistic or logically flawed or based on limited evidence <input type="checkbox"/> Conclusion reflects close mindedness and/or lack of self-awareness <input type="checkbox"/> Does not recognize the limits of conclusions. <input type="checkbox"/> Relies heavily on instructor guidance | <ul style="list-style-type: none"> <input type="checkbox"/> Does not reach or Reaches in accurate, overly simplified or overly biased conclusion <input type="checkbox"/> Relies on inappropriate sources, does not make connections between sources <input type="checkbox"/> Conclusion is not relevant, or is extreme or is unsubstantiated | <p>All Critical Analysis and Reasoning Assessment instruments must score this measure.</p> |

Montgomery College General Education Assessment Rubric: Effective Communication, Oral Communication

Montgomery College's Effective Communication, Oral Communication Rubric is based on the Association of American Colleges and Universities' *Oral Communication VALUE Rubric*, and Sinclair Community College's Oral Communication rubric.

Effective Oral Communication includes the ability to communicate effectively in verbal and written language, the ability to use a variety of modern information resources and supporting technologies, the ability to differentiate content from style of presentation, and the ability to suit content and style to the purpose of the communication.

| Standard 1 Content: Student can respond appropriately to content requirements for a given assignment. | | | | |
|--|---|---|---|---|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Has a compelling and well developed (precisely stated, appropriately repeated, memorable, and strongly supported) central message and purpose <input type="checkbox"/> Includes a variety of types of materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make appropriate reference to information or analysis which significantly supports the central message or establishes the presenter's credibility/authority on the topic | <ul style="list-style-type: none"> <input type="checkbox"/> Has a clear and understandable central message and purpose <input type="checkbox"/> Includes supporting materials (explanations, examples, illustrations, statistics, analogies, quotations from relevant authorities) that make appropriate reference to information or analysis which generally supports the presentation or establishes the presenter's credibility/authority on the topic <input type="checkbox"/> Relies on limited instructor support to develop content | <ul style="list-style-type: none"> <input type="checkbox"/> Has a central message and purpose that is difficult to be deduced, and may not be explicitly clear or developed in the presentation <input type="checkbox"/> Includes minimal supporting materials which may insufficiently reference information or analysis and minimally support the presentation or establish the presenter's credibility/authority on the topic. <input type="checkbox"/> Relies on significant instructor support to develop content | <ul style="list-style-type: none"> <input type="checkbox"/> Has an unclear central message and purpose that may not be fully developed <input type="checkbox"/> Does not include appropriate supporting materials | <p>Not Applicable</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

| Standard 2 Organization: Student can use organizational strategies and devices effectively to focus and unify his or her text. | | | | |
|--|--|---|--|---|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Uses an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) that is clearly and consistently observable, is skillful and makes the content of the presentation cohesive. | <ul style="list-style-type: none"> <input type="checkbox"/> Uses an organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) that is clearly and consistently observable within the presentation. | <ul style="list-style-type: none"> <input type="checkbox"/> Uses a simplistic organizational pattern (specific introduction and conclusion, sequenced material within the body, and transitions) that may be intermittently observable within the presentation <input type="checkbox"/> Relies heavily on instructor guidance and support to develop organizational pattern | <ul style="list-style-type: none"> <input type="checkbox"/> Uses an ineffective organizational pattern that | <p>Not Applicable</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

| | | | | |
|---|---|--|--|---|
| Standard 3 Delivery: Student can use appropriate, effective delivery style and techniques to further the purpose of the communication. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <input type="checkbox"/> Uses verbal and non-verbal delivery techniques (posture, gesture, eye contact, and vocal expressiveness) that make the presentation compelling, and make the speaker appear polished and confident. <input type="checkbox"/> Uses visual aids that provide significant impact in making key points. | <input type="checkbox"/> Uses verbal and non-verbal delivery techniques (posture, gesture, eye contact, and vocal expressiveness) that make the presentation effective <input type="checkbox"/> Uses visual aids that enhance and provide emphasis in making key points. | <input type="checkbox"/> Inconsistently uses verbal and non-verbal delivery techniques (posture, gesture, eye contact, and vocal expressiveness) <input type="checkbox"/> Uses visual aids that are unimaginative and/or simplistic <input type="checkbox"/> Relies heavily on instructor guidance | <input type="checkbox"/> Does not use effective delivery techniques. | |

| | | | | |
|---|---|---|---|---|
| Standard 4 Interpersonal Skills : Student demonstrates an understanding of effective and appropriate interpersonal skills. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <input type="checkbox"/> Consistently demonstrates effective and appropriate interpersonal skills (questioning, paraphrasing, descriptive language, empathy, negotiation, conflict management, supporting non verbal cues). | <input type="checkbox"/> Occasionally demonstrates effective and appropriate interpersonal skills (questioning, paraphrasing, descriptive language, empathy, negotiation, conflict management, supporting non verbal cues). | <input type="checkbox"/> Demonstrates simplistic or limited range of interpersonal skills <input type="checkbox"/> Relies heavily on instructor guidance | <input type="checkbox"/> Does not demonstrate effective interpersonal skills. | |

| | | | | |
|---|---|---|---|---|
| Standard 5 Listening Behavior: Student demonstrates an understanding of effective and appropriate listening behaviors. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident (0) | |
| <input type="checkbox"/> Consistently uses attentive, respectful listening behaviors in oral communication situations. | <input type="checkbox"/> Consistently uses some effective listening behaviors in oral communication situations. | <input type="checkbox"/> Inconsistently uses some effective listening behaviors in oral communication situations. | <input type="checkbox"/> Does not use effective listening behaviors in oral communication situations. | |

| | | | | |
|--|---|--|--|---|
| Standard 6 Academic Integrity: Student uses appropriate academic practices for acknowledging and using sources and documentation. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Reflects current academic practices for use of sources and documentation established by professional associations | <input type="checkbox"/> Reflects current academic practices for use of sources and documentation established by professional associations. | <input type="checkbox"/> Inconsistently reflects current academic practices of use of sources and documentation established by professional associations and relies heavily on instructor guidance | <input type="checkbox"/> Plagiarizes <input type="checkbox"/> Does not use appropriate academic practices for use of sources and documentation. | |

Montgomery College General Education Assessment Rubric: Information Literacy

Montgomery College's Information Literacy Rubric is based on the Montgomery College Standards and Expectations for Information Literacy that were developed by an interdisciplinary group of faculty including Librarians. Using the Association of College and Research Libraries' (ACRL) "Information Literacy Competency Standards for Higher Education", the Information Literacy Focus Group adapted the standards for Montgomery College.

Information Literacy includes the ability to identify, locate, and effectively use information from various print and electronic sources.

| Standard 1 Know: The information literate student determines the nature and extent of the information needed. | | | | |
|---|--|--|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Develops, revises and follows a plan of action to complete a research assignment or activity, including a realistic time frame, independently. <input type="checkbox"/> articulates a sophisticated , relevant research question <input type="checkbox"/> Demonstrates a sophisticated ability in determining availability of, and gathering of, appropriate source materials <input type="checkbox"/> identify and develop new skills, such as technology and research skills, when needed to complete a research assignment or activity | <ul style="list-style-type: none"> <input type="checkbox"/> develops, revises and follows a plan of action to complete a research assignment or activity, including a realistic time frame, with instructor support. <input type="checkbox"/> articulates a research question appropriate for the assignment or activity. <input type="checkbox"/> Determines the availability of, and gathers, the appropriate source materials. <input type="checkbox"/> relies on familiar skills and strategies to complete research tasks | <ul style="list-style-type: none"> <input type="checkbox"/> needs significant instructor support to develop a plan of action for a research assignment. <input type="checkbox"/> articulates a research question that may be too basic or limited in scope <input type="checkbox"/> Requires significant support to determine the availability of, and gather, the appropriate source materials. <input type="checkbox"/> Has limited skills and strategies to complete research tasks | <ul style="list-style-type: none"> <input type="checkbox"/> Is unable to develop a feasible plan of action for a research assignment. <input type="checkbox"/> does not articulate a research question or articulates a research question unrelated to the assignment or activity. <input type="checkbox"/> Is unable to determine the availability of, or gather, the appropriate source materials <input type="checkbox"/> Does not demonstrate effective strategies to complete research tasks | <p style="text-align: center;">Not Applicable</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

| Standard 2 Access: The information literate student is able to access needed information effectively and efficiently. | | | | |
|--|--|---|---|--|
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident(0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates a sophisticated understanding of source material <input type="checkbox"/> Independently, employs sophisticated approaches for collecting and maintaining source material <input type="checkbox"/> identify gaps in his or her knowledge, skills, or resources and refine research strategies and/or develops new skills, as necessary, independently | <ul style="list-style-type: none"> <input type="checkbox"/> Identifies appropriate types and formats of source material needed to complete a research assignment or activity with some instructor support <input type="checkbox"/> employs efficient and effective approaches for collecting and maintaining source material with limited instructor support <input type="checkbox"/> identifies gaps in knowledge, skills or resources in a limited way, and completes tasks independently | <ul style="list-style-type: none"> <input type="checkbox"/> Relies heavily on instructor support to identify appropriate types and formats of source material needed and identifies limited range of materials <input type="checkbox"/> employs simplistic approaches for collecting and maintaining source material and requires significant instructor support <input type="checkbox"/> Relies on instructor or other support to complete tasks and/or demonstrates limited ability to identify knowledge or resource gaps | <ul style="list-style-type: none"> <input type="checkbox"/> Is unable to identify appropriate types and formats of source materials needed. <input type="checkbox"/> Does not demonstrate the ability to collect and maintain source material <input type="checkbox"/> Is unable to complete research tasks and/or is unable to identify knowledge or resource gaps. | <p style="text-align: center;">Not Applicable</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |

| | | | | |
|--|--|--|--|--|
| Standard 3 Evaluate: The information literate student evaluates information and sources critically and incorporates selected information into his or her knowledgebase and value system. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Demonstrates advanced, independent ability to evaluate information for currency, objectivity, and validity. <input type="checkbox"/> Independently determines relevance to the research question <input type="checkbox"/> Seeks and responds appropriately to critical feedback | <input type="checkbox"/> With limited guidance, critically evaluates information for currency, objectivity, and validity <input type="checkbox"/> determines relevance of information to the research question with guidance. <input type="checkbox"/> May seek critical feedback but responds superficially | <input type="checkbox"/> Does not or is unable to evaluate information for objectivity, currency, validity or relevance to the research question <input type="checkbox"/> Does not seek or respond to critical feedback | <input type="checkbox"/> Does not or is unable to evaluate information for objectivity, currency, validity or relevance to the research question <input type="checkbox"/> Does not seek or respond to critical feedback | |

| | | | | |
|---|---|---|--|--|
| Standard 4 Use: The information literate student, individually, or as a member of a group, uses information effectively to accomplish a specific purpose. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |
| Advanced (3) | Proficient (2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Demonstrates sophisticated ability to identify and summarize information be paraphrased or quoted. <input type="checkbox"/> Demonstrates advanced ability to synthesize new and prior information, including the use of quotations and paraphrases, in a manner that supports the purposes of the assignment or activity, independently. <input type="checkbox"/> Uses supplemental information, including graphics or data, in a sophisticated manner supporting the purpose of the assignment. | <input type="checkbox"/> Identifies information and concepts to be paraphrased or quoted. <input type="checkbox"/> selects and integrates new and prior information, including the use of quotations and paraphrases, in a manner that supports the purposes of the assignment or activity, with limited support. <input type="checkbox"/> Uses supplemental information, including graphics or data, in a manner that supports the purpose of the assignment, with limited guidance. | <input type="checkbox"/> Identifies or summarize information and concepts to be paraphrased or quoted with guidance <input type="checkbox"/> Simplistically, synthesizes or integrates new and prior information or relies heavily on support <input type="checkbox"/> uses supplemental information simplistically and/or relies heavily on instructor support to use supplemental information | <input type="checkbox"/> does not accurately identify or summarize information and concepts to be paraphrased or quoted <input type="checkbox"/> does not synthesize or integrate new and prior information <input type="checkbox"/> does not use supplemental information appropriately | |

Standard 5 Ethics: The information literate student understands many of the economic, legal, and social issues surrounding the use of information and accesses and uses information ethically and legally.

| Advanced (3) | Proficient (2) | Novice (1) | Not Evident(0) | |
|---|--|---|--|--|
| <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrates an advanced ability to identify documents and resources that are protected by copyright or are otherwise considered to be intellectual property, independently <input type="checkbox"/> Demonstrates a sophisticated understanding of what constitutes plagiarism and use resources or materials only with proper attribution, independently. <input type="checkbox"/> Accepts responsibility for the ideas presented in the final product. | <ul style="list-style-type: none"> <input type="checkbox"/> Correctly identifies documents and resources that are protected by copyright or are otherwise considered to be intellectual property, with limited support. <input type="checkbox"/> Understands what constitutes plagiarism and use resources or materials only with proper attribution, with limited support. <input type="checkbox"/> Accepts responsibility for the ideas presented in the final product. | <ul style="list-style-type: none"> <input type="checkbox"/> identifies documents and resources that are considered to be protected by copyright or are otherwise considered to be intellectual property with significant instructor guidance <input type="checkbox"/> Demonstrates a limited understanding of what constitutes plagiarism and does not consistently attribute source material <input type="checkbox"/> Does not accept responsibility for ideas presented in a final product | <ul style="list-style-type: none"> <input type="checkbox"/> Plagiarizes <input type="checkbox"/> Does not accept responsibility for ideas presented in a final product | <p>Not Applicable</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance |

Montgomery College General Education Assessment Rubric: Effective Communication, Writing

Montgomery College’s Effective Communication, Writing Rubric is based on the Montgomery College General Education Writing Standards, the State of Maryland’s expectations for a “C” paper, Washington State University’s Integrated Critical Thinking Rubric, and the Association of American Colleges and Universities’ *Written Communication VALUE Rubric*.

Effective Written Communication includes the ability to communicate effectively in verbal and written language, the ability to use a variety of modern information resources and supporting technologies, the ability to differentiate content from style of presentation, and the ability to suit content and style to the purpose of the communication.

| Standard 1 Content: Student can respond appropriately to content requirements for a given assignment. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|---|---|---|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Uses appropriate, relevant, and compelling content to illustrate mastery of the subject, conveying the writer’s understanding, and shaping the whole work <input type="checkbox"/> Exceeds the discipline and assignment expectations, meeting all specified requirements, such as subject, organization, and length, independently <input type="checkbox"/> Integrates and responds to alternate points of view | <input type="checkbox"/> Uses appropriate and relevant content to develop and explore ideas through most of the work <input type="checkbox"/> Fulfills the discipline and assignment expectations, meeting all specified requirements, such as subject, organization, and length, with limited support | <input type="checkbox"/> Uses limited content to develop and explore simple ideas <input type="checkbox"/> Basically or simplistically meets the discipline and assignment expectations, with significant instructor guidance <input type="checkbox"/> Provides a simplistic or one sided view of the topic | <input type="checkbox"/> uses irrelevant or inaccurate content or information and does not develop or explore appropriate ideas <input type="checkbox"/> Does not meet the discipline or assignment expectations | |

| Standard 2 Organization: Student can use organizational strategies and devices effectively to focus and unify their text. | | | | Not Applicable <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |
|---|---|---|---|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Exceeds discipline and assignment expectations for organization <input type="checkbox"/> Uses an advanced organizational pattern that maintains focus and unity throughout the text while furthering the central idea and skillfully using the following organizational devices to connect ideas throughout the text: thesis statement, topic sentences, opening and closing paragraphs and transitions throughout the assignment | <input type="checkbox"/> Follows the discipline and assignment expectations for organization <input type="checkbox"/> Maintains focus and unity throughout the assignment while supporting a central idea, or thesis using some of the following organizational devices to connect ideas throughout the text: thesis statement, topic sentences, opening and closing paragraphs, and transitions throughout most of the assignment <input type="checkbox"/> Relies on limited instructor guidance | <input type="checkbox"/> Simplistically, meets discipline and assignment expectations for organization and relies heavily on instructor guidance; <input type="checkbox"/> Uses a simplistic or unclear central idea or thesis; <input type="checkbox"/> uses organizational devices such as a central idea, topic sentences, opening and closing paragraphs or transitions inconsistently or relies on significant instructor guidance | <input type="checkbox"/> Uses ineffective organizational pattern or does not meet discipline or assignment expectations <input type="checkbox"/> Lacks a central idea or thesis, focus or unity and includes irrelevant and unrelated ideas. <input type="checkbox"/> Does not use organizational devices such as topic sentences, opening and closing paragraphs and transitions effectively | |

| Standard 3: Style and Expression: Student can use appropriate, effective style and tone to further the purpose of the text. | | | | Not Applicable |
|--|--|--|---|--|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Uses a superior style (tone, word choice, sentence patterns) for the discipline, assignment, audience and purpose, and <input type="checkbox"/> Clearly communicates ideas and may be nuanced or eloquent. | <input type="checkbox"/> Consistently, uses effective style (tone, word choice, sentence patterns) for its discipline, assignment, audience, and purpose; <input type="checkbox"/> Clearly communicates ideas | <input type="checkbox"/> Uses a simplistic style (tone, word choice, and sentence patterns) and relies heavily on instructor guidance; <input type="checkbox"/> Ideas are conveyed simplistically | <input type="checkbox"/> Uses a style (tone, word choice, and sentence patterns) that is not appropriate for discipline, assignment, audience or purpose <input type="checkbox"/> Fails to communicate ideas effectively and may obscure meaning | <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

| Standard 4: Mechanics: Student can follow conventions of standard written U.S. English. | | | | Not Applicable |
|--|---|--|---|--|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Follows conventions of standard written U.S English and avoids of errors in grammar, mechanics, punctuation and usage | <input type="checkbox"/> Follows the conventions of standard written U.S. English and generally avoids errors (grammar, mechanics, punctuation, and usage) that impede meaning or distract the reader | <input type="checkbox"/> has persistent errors in grammar, mechanics, punctuation and usage that may impede meaning and relies heavily on instructor guidance to correct | <input type="checkbox"/> Has significant errors in grammar, mechanics, punctuation, and usage that significantly impede meaning | <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

| Standard 5: Academic Integrity: Student can demonstrate academic integrity in his or her writing. | | | | Not Applicable |
|--|---|--|---|--|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <input type="checkbox"/> Reflects current academic practices for use of sources and documentation established by professional associations | <input type="checkbox"/> Reflects current academic practices for use of sources and documentation established by professional associations, with limited guidance | <input type="checkbox"/> Inconsistently reflects current academic practices of use of sources and documentation established by professional associations and relies heavily on instructor guidance | <input type="checkbox"/> Plagiarizes <input type="checkbox"/> Does not use appropriate academic practices for use of sources and documentation | <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

Montgomery College General Education Assessment Rubric: Technological Competency

Montgomery College’s Technological Competency rubric is based on Montgomery College’s definition of Technological competency and is designed to be used in conjunction with any of the other General Education Rubrics. Student performance will generally only be measured in one area of technological competency: use of general software applications; use of discipline or course specific software applications, and/or use of a technological device to complete a task. The specifics of the software application or technological tool used will be collected as part of the assessment plan.

| Standard 1 Content: Student can use general purpose software applications, discipline specific software applications, or a technological device to complete tasks. | | | | |
|--|--|---|--|---|
| Advanced(3) | Proficient(2) | Novice (1) | Not Evident(0) | |
| <ul style="list-style-type: none"> <input type="checkbox"/> Uses technology, fluently, to complete advanced tasks, independently. <input type="checkbox"/> Seeks new technological resources to complete tasks <input type="checkbox"/> Communicates or illustrates ideas clearly and correctly using technology. | <ul style="list-style-type: none"> <input type="checkbox"/> Uses technology for routine tasks with minimal assistance <input type="checkbox"/> Uses familiar resources. <input type="checkbox"/> Communicates or illustrates ideas, with minimal errors, using technology <input type="checkbox"/> Relies on limited instructor guidance to complete tasks | <ul style="list-style-type: none"> <input type="checkbox"/> Uses technology for basic tasks with assistance <input type="checkbox"/> May use technology inefficiently <input type="checkbox"/> Uses a minimum of resources <input type="checkbox"/> Communicates or illustrates ideas using technology in a limited way <input type="checkbox"/> Relies heavily on instructor guidance to complete tasks | <ul style="list-style-type: none"> <input type="checkbox"/> Does not use technology effectively or correctly <input type="checkbox"/> Does not use appropriate resources <input type="checkbox"/> Does not communicate ideas effectively or clearly | <p>Not Applicable</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assessment task does not reflect these characteristics for student performance. |

Note: for assessments using technological devices, the only the first performance criteria maybe relevant.