COMPUTING PROFESSIONAL SKILLS ASSESSMENT (CPSA) RUBRIC

Rater's Name:_____ **Date of Rating:**_____ **Section and Group Number:** _____

Note: The six computing professional skills learning outcomes of the CPSA Rubric can be mapped to the ABET Computing Accreditation Commission (CAC) Criterion 3, Student Outcomes. In addition, the CPSA Rubric learning outcomes can be mapped to other quality assurance stakeholder criteria. Each dimension of the CPSA Rubric comprises a definition of the outcome and the outcome's performance indicators.

Scoring Protocol:
1. Skim the scenario used for the discussion.
2. Quickly read the discussion, marking passages where a given skill is exhibited. A given passage may exhibit more than one skill simultaneously.
3. During a second read, highlight passages that provide strong evidence (either positive or negative) related to the skills.
4. Read the skill definition. Assign scores for each of the performance indicators.
5. In the comment boxes, provide line numbers or a short phrase, such as: lines 109-112: trade off of personal freedom vs national security; lines 428-436: ethical analysis. Be sure to refer back to the skill definition.
6. Update your initial scores should the data provide evidence for a score change.
7. Ultimately assign one score for the skill. Use whole numbers; no increments.

General Decision Rules
1. Assess what is written. Don't "read between the lines" (e.g., don't make assumptions about what the group should know given what is written.).
2. When conflicted on assigning a score, reference adjacent score description boxes to determine whether a higher or lower score within the description box is more accurate.
3. Weigh all performance indicators within a category equally in assigning the overall score.
4. Assign the higher score associated with a box only when evidence for all performance criteria is present.
5. Read the skill definition after scoring to check the score for accuracy.
6. When averaging scores for the performance indicators, apply traditional rules for rounding. For example, 2.5 would be a 3 not a 2.

Scoring Tips
1. Supply page numbers and/or line numbers for reference in the comment box.
2. Strive to complete transcript review and scoring within a 45-60 minutes.

CPSA 1. Students problem solve from a computing perspective.

Rater Composite Score for Skill_____

Definition: Students define and differentiate between the problems raised in the scenario with reasonable accuracy. Students recommend potential non-technical and technical solutions from a computing perspective. Students identify relevant stakeholders and explain their perspectives.

	0 - Missing	1 - Emerging	2 - Developing	3 - Practicing	4 - Maturing	5 - Mastering
Problem Identification	Students do not identify the problems in the scenario.	Students begin to define the problems. Attempts to define the problems may be general, narrow, and/or inaccurate.		Students define the problems with reasonable accuracy and differentiate between them with limited justification.		Students convincingly and accurately define the problems and differentiate between them, providing realistic justification.
Recommendations for Solutions	Students do not make any recommendations for potential solutions.	Students may recommend potential solutions that don't fit the identified problems. Students may make recommendations for potential solutions without identifying the problems first.		Students propose reasonably viable recommendations for non-technical and technical potential solutions.		Students propose detailed and viable recommendations for non-technical and technical potential solutions.
Stakeholder Perspectives	Students do not identify stakeholders.	Students begin to identify stakeholders and their perspectives.		Students explain the perspectives of major relevant stakeholders and convey these with reasonable accuracy.		Students thoughtfully consider perspectives of diverse relevant stakeholders and articulate these with clarity and accuracy.

Comments

CPSA 2. Students work together as a group.

Rater Composite Score for Skill_____

Definition: Students interact in a group setting by acknowledging, building on, clarifying and/or critiquing each other's ideas.

	0 - Missing	1 - Emerging	2 - Developing	3 - Practicing	4 - Maturing	5 – Mastering
Discussion	Students do not acknow-ledge or encourage participation of others.	Students notice other students' ideas. Students may make attempts to bring others into the discussion. Students may pose individual opinions without linking to what others say.		Students acknowledge, build on, clarify and/or critique other's ideas with some success.		Students encourage participation from all group members, generate ideas together, actively help each other, and clarify and/or critique each other's ideas.
Comments						

CPSA 3. Students consider ethical, legal, and security aspects.

Rater Composite Score for Skill_____

Definition: Students identify relevant ethical, legal and security aspects in their discussion of problems and potential solutions.

	0 - Missing	1 - Emerging	2 - Developing	3 - Practicing	4 - Maturing	5 - Mastering
Ethical, Legal, Security Aspects	Students do not identify ethical, legal, and security considerations.	Students detect related ethical, legal and/or security aspects of the problems and possibly also the potential solutions.		Students identify relevant ethical, legal, and security aspects in context of the problems and potential solutions.		Students clearly classify relevant ethical, legal, and security aspects and evaluate each in the context of the problems and potential solutions.
Comments						

CPSA 4. Students communicate professionally in writing.

Rater Composite Score for Skill_____

Definition: Students write clearly in a grammatically accurate manner, adhering to punctuation and spelling conventions. Students demonstrate the disciplinary vocabulary expected of a computing professional.

	0 - Missing	1 - Emerging	2 - Developing	3 - Practicing	4 - Maturing	5 – Mastering
Grammar, Punctuation and Spelling	Student writing doesn't follow standard rules.	Students communicate using inaccurate and/or unconventional use of grammar, punctuation and spelling.		Students communicate using accepted conventions in grammar, punctuation and spelling.		Student communication adheres to accepted conventions of grammar, punctuation and spelling expected of a professional in the workplace.
Vocabulary	Students do not use vocabulary related to the computing discipline.	Students use vocabulary that show they are aware of common computing terms and use them mostly accurately.		Students use discipline-specific vocabulary expected of a computing professional and with accuracy.		Students consistently use context appropriate, discipline-specific and accurate vocabulary expected of a computing professional in the workplace.
Comments						

CPSA 5. Students analyze the consequences of existing computing solutions within local and global contexts.

Rater Composite Score for Skill_____

Definition: Students analyze intended and unintended consequences of existing computing solutions on individuals, organizations and society within local and global contexts.

	0 - Missing	1 - Emerging	2 - Developing	3 - Practicing	4 - Maturing	5 – Mastering
Consequences of Computing Solutions	Students do not consider consequences of computing solutions.	Students begin to analyze intended and unintended consequences of existing computing solutions on individuals, organizations and/or society within local and global contexts.		Students analyze intended and unintended consequences of existing computing solutions on individuals, organizations and/or society within local and global contexts.		Students accurately, systematically and thoughtfully analyze intended and unintended consequences of existing computing solutions on individuals, organizations and/or society within local and global contexts.

Comments

CPSA 6. Students interpret, represent, and seek information.

Rater Composite Score for Skill_____

Definition: Students interpret and represent information in the scenario and other sources. Students seek information from other sources and present new information to support their points and extend the group discussion.

	0 - Missing	1 - Emerging	2 - Developing	3 - Practicing	4 - Maturing	5 – Mastering
Interpret, Represent Information	Students don't refer to information presented in the scenario.	Students refer to information presented, but may misinterpret or misrepresent it.		Students, to a large extent, accurately interpret and represent information presented.		Students consistently and accurately interpret and represent information presented.
References Sources of Information	Students don't reference sources.	Students reference the source/s of information, but it may be incomplete.		Students reference the source/s of information in a manner that others can easily retrieve the source.		Students consistently and accurately use established conventions for citation and referencing.
Seek Additional Information	Students do not seek information from additional sources.	Students begin to seek additional information relevant to the discussion. Source credibility may vary.		Students provide additional information from credible sources to support and extend the discussion.		Students consistently provide high quality additional information to support the discussion and extend their knowledge.

Comments