

RHIT Institutional Assessment Outline with Rubrics

Updated September 10, 2005

A. Ethics - A recognition of ethical and professional responsibilities

When given the opportunity, students will:

1. Demonstrate knowledge of a professional code of ethics.

Description: The student should clearly establish that he/she has read and understands a professional code of ethics (e.g., by quoting a specific passage, referencing a specific verse, or otherwise displaying an intimate knowledge of the code).

Example: A passage or section from the code of an engineering professional organization (e.g., AICHE, NSPE, ASCE, etc.), could be cited, or one from another professional organization code (e.g., the American Psychological Association code could be cited by students in a psychology class).

Not Acceptable: Citing the RHIT student code of ethics, or other unrelated codes of conduct, like the Constitution, the Ten Commandments, or engineering codes and standards that deal with issues like details of construction, testing, or product specifications (e.g., ASME Pressure Vessel Code, ASTM specifications, building codes, or safety codes).

2. Evaluate the ethical dimensions of professional engineering, mathematical, and scientific practices.

Description: The student should describe an application of a professional code of ethics related to engineering, mathematics, or science, with a clear connection between the code provision and the application.

Example: A case study, a personal experience, or a debate about a contemporary issue could be used as long as there is an ethical dimension involved.

Not Acceptable: Describing an ethical issue outside of engineering, mathematics, and science (such as social science) or an application that does not clearly involve ethics.

B. Contemporary Issues - An understanding of how contemporary issues shape and are shaped by mathematics, science, & engineering

When applying the principles of mathematics, science, and/or engineering to a technical problem, students will:

1. Demonstrate an awareness of how the problem is affected by social concerns and trends.

Description: The student should define the technical problem and demonstrate the link between it and social concerns/trends. A student should recognize the larger social context in which the problem emerges.

Example: A student may link the oil crisis to the development of hybrid cars.

Not Acceptable: A student describes a typical day in his/her life, there is no discussion of the larger social context, or the problem is not a technical problem.

2. Demonstrate an awareness of how the proposed solution(s) will affect culture and the environment.

Description: The student should offer a proposal for solving the problem posed in Criterion A. The link between the solution and the culture at large/environment must be explicit.

Example: The student could evaluate the hybrid car solution to the oil crisis by measuring pollution levels.

Not Acceptable: The cultural/environmental effects are not evaluated, or the problem is not a technical problem.

C. Global - An ability to recognize the impact of global societies on citizens and professionals

When given the opportunity, students will:

1. Demonstrate an awareness of the historical development of cultures and societies.

Description: The student discusses/summarizes the societal impact of events, processes, and/or developments. The student may deal with only one nation or culture, or with several.

Example: A student could examine any of the following: cases of cause and effect resulting from an historical event; the history of a culture within a county; historical events (political alliances, treaties, wars, social attitudes) with an emphasis on historical development.

Not Acceptable: The student provides only a chronological statement of events, or no evidence is provided. The student does not provide citation to appropriate references to support the thesis of the submission.

2. Show an awareness of the relationships of nations and the interdependence of peoples around the globe.

Description: The student demonstrates awareness of how two cultures or nations change and influence each other.

Example: A student could submit a paper on one of the following: an analysis of how the actions of one or more countries affect each other; a discussion of international relations; a paper from a course in sociology, anthropology, geography, political science, economics, or history when the analysis deals with more than one nation.

Not Acceptable: The submission only deals with a single people or culture, or there is no evidence of awareness of the relationships and/or interdependence. The submission only provides a comparison of two forms of government without analysis of their affect on one another; papers that simply contrast two forms of government but do not show the interdependence of the two forms.

D. Culture - An ability to understand diverse cultural and humanistic traditions

When given the opportunity, students will:

1. Perform, interpret, analyze, or otherwise engage in artistic, literary, and/or other forms of culture.

Description: The student demonstrates exposure to or engagement in artistic, literary, and/or other forms of culture.

Example: The student should document a non-technical, creative, or artistic expression of any culture: any assignment that comes from a literature class; analysis of a work of literature; a review of a student's work in a drama production or musical performance.

Not acceptable: There is no evidence of exposure to or engagement in artistic, literary, and/or other forms of culture. Translations of a document into another language; ethics papers, technical communication papers, social issues papers written for RH 131.

2. Interpret, analyze, or evaluate aspects of a society other than the student's own.

Description: The student analyzes characteristics of a society or culture other than his/her own, discusses the importance of contributions of people from other cultures, or evaluates an issue or problem from a cultural perspective other than his/her own.

Examples: The student could submit any of the following: a journal entry from a trip to a foreign country; a paper on a technology whose development was influenced by another culture(s); a paper that includes an analysis of a minority culture within the United States;

a paper that examines a political issue from the perspective of a non-U.S. country; a paper that examines religion from a non-U.S. perspective.

Not acceptable: A paper in which there is no interpretation, analysis, or evaluation of a society or culture other than the student's own. A paper in which a student dismisses cultures and/or societies other than his own.

E. Teams - An ability to work effectively in teams

When assigned to teams, students will:

1. Share responsibilities and duties.

Description: The student should describe the roles of each team member and indicate how sharing responsibilities facilitates project completion.

Example: In a team member evaluation, a student might list the tasks performed by each member of the group. A student might be team leader for one meeting, recorder for another meeting, responsible for generating AutoCad drawings, and check design calculations.

Not Acceptable: To list only the student's own responsibilities and only one role performed.

2. Analyze ideas objectively to discern feasible solutions and then build consensus.

Description: The student should indicate which ideas were considered and how the ideas were evaluated, discuss the outcome of the analysis of ideas with a brief justification, and articulate the process the group used for determining their final solution.

Example: A student might list pros and cons for multiple ideas, might justify the group's decision based on economic factors, and might submit minutes from the group meeting where the final solution was selected.

Not Acceptable: A list of ideas without analysis, selecting an idea without correlating it to some selection criteria, and submitting the final report without explanation of the process by which consensus was reached.

3. Develop a strategy for action.

Description: The student should identify the tasks necessary for successful completion of the group project.

Example: A student might use a Gantt chart to prepare a timetable for completion.

Not Acceptable: Failure to identify either tasks or milestones for completion.

F. Communication - An ability to communicate effectively in oral, written, graphical, and visual forms

When performing communication tasks, students will:

1. Identify readers/audience, assess their previous knowledge & information needs, and organize/design information to meet the needs.

Description: The student should give a brief description of the readers/audience for the document or project, an assessment of their needs, and a demonstration of how the information design accommodates that audience.

Example: A student may include an audience analysis worksheet or a usability study of the audience. A student could draw the rater's attention to a glossary of terms included in the document in order to accommodate readers less familiar with the topic.

Not Acceptable: A statement of the intended audience without an analysis of their previous knowledge or information needs, or a statement that the student accommodated readers without reference to particular features of the document or project.

2. Provide content that is factually correct, supported with evidence, explained with sufficient detail, and properly documented.

Description: The student should verify the information provided with reference to sources/authorities and document those authorities in a style appropriate to his/her discipline (IEEE, APA, MLA). The student should also provide adequate detail to assist the readers' understanding of the topic.

Example: A student could submit a Technical Communication report that documents statements cited from authoritative sources and provides a bibliography of such sources.

Not Acceptable: Any document that offers inadequate information without attribution or any document that appears to be plagiarized from an authoritative source.

3. Test readers/audience response to determine how well ideas have been relayed.

Description: The student should discuss how she tested her document/project on readers/audience and how that testing determined revisions to the document.

Example: A student may submit the results of a usability study that demonstrates how effectively the document met her readers' needs for information and discuss what changes were made to the document based on the results of the study.

Not Acceptable: No evidence of reader/audience testing of the document/project.

4. Submit work with a minimum of errors in spelling, punctuation, grammar, and usage.

Description: The student should submit a document/project that has a low percentage of mistakes.

Example: A student may submit a final design report that has been carefully proofread and edited.

Not Acceptable: A level of errors that is distracting or noticeable, such as finding errors in a one or two page sample of text, or in a conspicuous place such as a title, a heading, or an important term.

It is also believed that all students should be able to demonstrate the following characteristics with the performance indicators to be decided by each technical department:

- Problem Solving - An ability to apply the skills and knowledge necessary for mathematical, scientific, and engineering practices
- Interpreting Data - An ability to interpret graphical, numerical, and textual data
- Experiments - An ability to design and conduct experiments
- Design - An ability to design a product or process to satisfy a client's needs subject to constraints