**Design Process Rubric**

**Task Statement:** Students will practice the design process with a design solution drawing.

**Task Assignment:** Students will sketch, layout, plan, and design a solution drawing with key details and dimensions; identifying tasks, resources, andconstraints needed to reach project objectives; and conduct research for design for analysis and conclusions.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  | Criteria Categories |  |  |
| Criteria - |  | (Novice to Exemplary) |  |  |
| Concepts/Skills to be | **Novice** | **Developing** | **Accomplished** | **Exemplary** | **Points** |
| Assessed | **1** | **2** | **3** | **4** | **Earned** |
| Sketch, Layout, and Plan | Sequence of information | Work is hard to follow | Information is presented | Information is presented in |  |
|  | is difficult to follow. No | as there is very little | in a logical manner, which | a logical, interesting way, |  |
|  | apparent structure or | continuity. Some | is easily followed. | which is easy to follow. |  |
|  | continuity. Little evidence | evidence of a cohesive | Organizes material in an | Organizes material in a |  |
|  | of a cohesive plan. | plan. Sketch not | appropriate manner. | clear, appropriate, and |  |
|  | Sketch is carelessly | detailed enough to | Sketch converted into | precise manner. Sketch |  |
|  | created. | convert into drawing. | drawing. | easily converted into |  |
|  |  |  |  | drawing. |  |
| **(Possible 15 points)** | **(1-4 points)** | **(4-8 points)** | **(8-10 points)** | **(10-15 points)** |  |
| Design Solution Drawing | No design drawing, or | Drawing needs | Drawing communicates | Drawing communicates |  |
|  | reading and | improvement. Poor idea | design. Some idea | design clearly. Evidence of |  |
|  | understanding drawing is | development and | development supported | analysis, reflection and |  |
|  | difficult. Minimal idea | sequencing between | by relevant details. | insight. Drawing contains |  |
|  | development. No key | sketch and drawing. | Drawing details make | all key details and |  |
|  | details or dimensions, or | Unelaborated and/or | major points easy to | dimensions. |  |
|  | unrelated details. | repetitious details. Most | follow. Drawing contains |  |  |
|  |  | key details and | most key details and |  |  |
|  |  | dimensions missing. | dimensions. |  |  |
| **(Possible 15 points)** | **(1-4 points)** | **(4-8 points)** | **(8-10 points)** | **(10-15 points)** |  |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Project Objectives | No grasp of required | Uncomfortable with | Able to elaborate and | Demonstration of full |  |
| Resources and Constraints | subject matter. No | content. Only basic | explain to some degree. | knowledge of the subject |  |
|  | understanding of major | concepts are | Some identification of | with explanations and |  |
|  | issues. No interpretation | demonstrated and | major tasks. | elaboration. Identifies major |  |
|  | of results. Does not pay | interpreted. | Addresses the issue of | tasks needed to reach |  |
|  | attention to the resources | Poor identification of | resources and their | objectives. Specifies |  |
|  | needed and/or their | major tasks. | availability. | resources needed to |  |
|  | availability until it is too |  |  | complete each task and |  |
|  | late |  |  | establishes their availability. |  |
| **(Possible 15 points)** | **(1-4 points)** | **(4-8 points)** | **(8-10 points)** | **(10-15 points)** |  |
|  |  |  |  |  |  |
| Research for design | Either cannot identify key | Little or no evidence of | Correctly interprets data | Correct interpretation of |  |
|  | design issues or treats all | analysis or conclusion. | or information, but | data or information. |  |
|  | issues as equally | Research is limited. | analysis or conclusion | Identifies key design issues |  |
|  | important or unimportant. | Some documentation. | may not be supported by | and priorities. Analysis and |  |
|  | Little or no evidence of | Few possible solutions | research. Identifies | conclusion are based on |  |
|  | research presented. No | identified. | design issues and | research. Thoroughly |  |
|  | documentation. No |  | prioritizes them. Good | documented. Many |  |
|  | alternate solutions |  | documentation. Several | possible solutions |  |
|  | identified. |  | possible solutions | identified. |  |
|  |  |  | identified. |  |  |
| **(Possible 15 points)** | **(1-4 points)** | **(4-8 points)** | **(8-10 points)** | **(10-15 points)** |  |
| Follows Directions | Requirements of the | Some requirements | Follows all requirements | Completed all |  |
| Organization and | assignment have not | have been fulfilled. | for the assignment. Minor | requirements. Negligible |  |
| Management | been fulfilled. Numerous | Several errors. Some | errors. Much evidence of | errors. Effective editing |  |
|  | errors. Little evidence of | evidence of revision | revision and editing. | and revisions improve |  |
|  | revision or editing. Needs | and editing. | Performs in a satisfactory | overall quality of work. Able |  |
|  | continual reminders to | Demonstrates a | way with some | to make progress on project |  |
|  | stay "on task". | somewhat | supervision. | with minimal supervision. |  |
|  | Frequently late and off | organized approach | Demonstrates awareness | Consistently on time in |  |
|  | schedule. Shows lack of | with regular work habits | of progress and remains | completing tasks |  |
|  | judgment. No attempt is |  | more or less on schedule. |  |  |
|  | made to identify and |  | Most judgments about |  |  |
|  | categorize |  | priorities are appropriate. |  |  |
|  | necessary tasks. |  |  |  |  |
| **(Possible 25 points)** | **(1-10 points)** | **(10 to 14 points)** | **(14 to 16 points)** | **(16 to 25 points)** |  |
| Overall Quality | Poor work | Inconsistent work | Good work | Excellent work |  |
| **(Possible 15 points)** | **(1-4 points)** | **(4-8 points)** | **(8-10 points)** | (**10-15 points)** |  |
| A = 66-100 points; B = 54-66 | points; C = 30-54 points; D = | 6-30 points |  | **Total Points: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** |