

ECCS Department - Technical Design Rubric

Course: _____

Date: _____

Student(s): _____

	3 - Expert	2 – Practitioner	1 - Apprentice	0 - Novice
Identification of the problem Score: _____	The problem has been shown (not just stated) to exist with supporting factual evidence.	A problem statement has been stated.	The problem statement has weak support.	Problem has not been stated clearly and lacks any supporting evidence.
Research and information gathering Score: _____	Existing solutions to the problem, including their good and bad points, have been stated.	Existing solutions have been stated. Additional discussion may be warranted in places.	A complete review of existing solutions and research related to this problem is not presented.	Connection between references and what is written is not clear. Little investigation has been done.
Definition of the project Score: _____	<ul style="list-style-type: none"> • There are clear expectations of the specific outputs or deliverables for the project. • A set of measurable performance requirements has been created. 	<ul style="list-style-type: none"> • Expectations have been stated. • Some objectives may not be measurable. 	<ul style="list-style-type: none"> • Expectations have been stated. • Most objectives are not measurable. 	<ul style="list-style-type: none"> • Expectations are not clear. • Expectations are not measurable.
Development of a plan Score: _____	<ul style="list-style-type: none"> • A system block diagram has been developed to assist the team in solving the design. • All blocks have been broken down to a manageable level. 	<ul style="list-style-type: none"> • A system block diagram has been developed to assist the team in solving the design. • Not all blocks have been broken down to a manageable level. 	<ul style="list-style-type: none"> • A system block diagram has not been fully developed. • A few blocks have been broken down. 	<ul style="list-style-type: none"> • A system block diagram has not been fully developed. • The problem has not been divided into manageable tasks and blocks.
Execution of the plan Score: _____	All major points of the project were completed.	Most major project points were accomplished	Few of the major project points were accomplished.	None of the major project points were accomplished.
Verification of the design Score: _____	The prototype has been tested against the performance requirements listed in the definition of the project.	The prototype has not been fully developed or tested.	Little verification of design was accomplished.	No verification of design was accomplished.
Project Scheduling Score: _____	A plan stating the cost, completion date, and required resources has been presented. Gantt charts and a budget spreadsheet have been generated.	Some aspects of the plan have not been fully developed.	Few aspects of the plan have been developed.	Lack of planning is evident.
Technical level of project Score: _____	A significant portion of this project involves technical information outside the scope of the undergraduate curriculum.	Several technical aspects were new to the students and required research.	This project contains some research but mostly involves technical information taught at the junior and senior levels.	This project did not challenge the students to perform much research, as it relied mainly on information taught within the curriculum.