## The William States Lee College of Engineering Graduate Student Learning Outcomes: Written Reports

(Rev. 02/16/2012)

	GLO #1: Students analyze and evaluate advanced topics in engineering.			
Score	Criteria	1 Does Not Meet Expectations	2 Meets Expectations	3 Exceeds Expectations
	<b>WR1a:</b> Describes the scope and context of the defined problem	Does not adequately describe the scope and context of the problem; important details are missing	Adequately describes the scope and context of the problem; sufficient level of detail is provided	Comprehensively describes the scope and context of the problem; level of detail offers additional breadth, depth, and/or new insights
	WR1b:Demonstrates existing knowledge and emerging research on the topic	Does not adequately demonstrate knowledge of existing and emerging research on the topic; important details are missing	Adequately demonstrates knowledge of existing and emerging research on the topic; sufficient level of detail is provided	Comprehensively describes existing and emerging research on the topic; level of detail offers additional breadth, depth, and/or new insights
	WR1c: Compares and contrasts relevant aspects of the topic	Does not adequately compare/contrast relevant aspects of the topic; important similarities or distinctions are missing	Adequately compares/contrasts relevant aspects of the topic; sufficient level of similarities and distinctions are provided	Comprehensively compares/ contrasts relevant aspects of the topic; level of detail in similarities and distinctions offers additional breadth, depth, and/or new insights

Score	Criteria	1 Does Not Meet Expectations	2 Meets Expectations	3 Exceeds Expectations
	WR1d: Evaluates scope of analytical methods/tools and selects the most appropriate one(s)	Does not adequately evaluate the scope of analytical methods/tools and/or did not select the most appropriate one; some viable options were not considered or the best was not chosen	Adequately evaluates the scope of analytical methods/tools and selected the most appropriate one; all obvious options were considered and the best was chosen	Comprehensively evaluates the scope of analytical methods/tools and selected the most appropriate one; new or optional analytical tools were also considered and the best was chosen
	WR1e: Identifies assumptions and constraints relevant to the analytical methods/tools selected	Does not adequately identify assumptions and constraints relevant to the analytical method selected; important assumptions or constraints are missing	Adequately identifies assumptions and constraints relevant to the analytical method selected; all obvious assumptions and constraints are identified	Comprehensively identifies assumptions and constraints relevant to the analytical method selected; assumptions and constraints beyond the obvious offer additional breadth, depth, and/or new insights
	WR1f: Develops an appropriate model for analysis	Does not adequately develop an appropriate model for analysis; important aspects of the model are missing or extraneous aspects are included	Adequately develops an appropriate model for analysis; all obvious aspects of the model are included and justified	Comprehensively develops an appropriate model for analysis; new and relevant aspects of the model offer additional breadth, depth, and/or new insights
	WR1g: Analyzes topic beyond the previous level of coursework (BS or MS)	Does not adequately analyze topic at the MS/PhD level; important aspects of analysis/ evaluation is missing	Adequately analyzes topic at the MS/PhD level; sufficient level of analysis/evaluation is provided	Comprehensively analyzes topic at the MS/PhD level; level of analysis/evaluation offers additional breadth, depth, and/or new insights

3

Score	Criteria	1 Does Not Meet Expectations	2 Meets Expectations	3 Exceeds Expectations
	WR1h: Evaluates topic beyond the previous level of coursework (BS or MS)	Does not adequately evaluate topic at the MS/PhD level; important aspects of analysis/ evaluation is missing	Adequately evaluates topic at the MS/PhD level; sufficient level of analysis/evaluation is provided	Comprehensively evaluates topic at the MS/PhD level; level of analysis/evaluation offers additional breadth, depth, and/or new insights
	WR1i: Interprets results within the scope and context of the defined problem	Does not adequately interpret results within the scope and context of the defined problem; interpretation is incomplete or lacks rationale	Adequately interprets results within the scope and context of the defined problem; interpretation is complete and rational	Comprehensively interprets results within the scope and context of the defined problem; interpretation is complete, rational, and offers additional breadth, depth, and/or new insights
	WR1j: Makes appropriate recommendations and/or identifies next steps	Does not make recommendations or identify next steps <b>or</b> recommendations and next steps are not justified based on results	Makes recommendations and identifies next steps that are commensurate with results	Makes recommendations and identifies next steps beyond the scope of the project but which have other relevance

GLO #1 SCORE: \_\_\_\_\_/30

PERFORMANCE TARGET: 20/30

Score	Criteria	1 Does Not Meet Expectations	2 Meets Expectations	3 Exceeds Expectations
	WR2a: Document conforms to format specified by the Graduate School (style, font size and type, margins, spacing, pagination, numbering, and organization)	Does not conform to format specified by the Graduate School	Conforms to format specified by the Graduate School	N/A
	WR2b:Referencing format conforms to discipline standards	Does not conform to referencing format of the discipline	Conforms to referencing format of the discipline	N/A
	WR2c: Quality of content, organization, and coherence of writing is at a level expected of professional publications	Is not at a level expected of professional publications; needs extensive revision	Is at a level expected of professional publications with minor or no revision	N/A
LO #2 S0	CORE:/6		PERF	ORMANCE TARGET: 6/6
OTAL SC	ORE:/36		PERFORMAN	CE TARGET: 26/36 (72%