

CE 331 -- Civil Engineering Materials II

Asphalt Production and Testing Laboratory Rubric

	Component	Criteria			NOTES
		Marginal (1)	Acceptable (2)	Exceptional (3)	
1	Summary				
	1. Describes the goals of the experiment	Identifies one goal of the lab	Identifies most of the goals	Clearly identifies the goals of the laboratory	
	2. Provide an overview of the materials and methodology	Describes one of the items	Describes two of the items	Concisely and accurately describes the materials, production, and testing procedures	
	3. Identify the major findings of the experiment	Identify one major items	Identify two major items	Identify all major findings	
	4. Qualitative observations from specimen preparation	Describes one of the items	Describes three of the items	Mixing effort, appearance, and compaction effort with different mixtures (asphalt content and aggregate gradation)	
2	Results				
	1. Table 1: Provide the mixture designs and calculate the binder content	Table is not clear	Values are correct, but table is badly organized.	Values in the table are correct, clearly organized and differentiates between surface and binder mixtures	Table captions=above table Figure captions=below figure
	2. Figures 1 & 2: compressive strength vs asphalt content for surface and binder mixtures	Shape/values are incorrect; does not identify optimum binder content	Values are incorrect, but the shape is correct. An optimum binder content is identified	Figures have correct values and clearly identifies the optimum binder content.	A curve should be fit to experimental data, and the peak of that curve used to determine the optimum asphalt content.
3	Format and Organization	Not organized clearly. MORE THAN ONE PAGE.	Well-structured, but writing tends to ramble	Good organization; Succinct write-up	
4	Units, General	Poor formatting. Mixed units. Improper use of significant figures.	Average formatting. Proper units. Improper use of significant figures.	Professional formatting. Proper units. Proper significant figures.	
5	Appendix	Binder content is not calculated correctly		Includes excel sheets in the appendix. This is free points to check your calculations	Check lab prep slides to calculate asphalt content (slide 17)

The total for this lab report is 27 points.