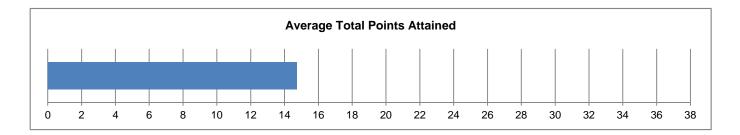
# Sam Houston State University

# **CAT Institutional Report**

August 2016 - College of Humanities and Social Sciences

### CAT Overview: Descriptive Statistics for CAT Total Score Sam Houston State University: August 2016 - College of Humanities and Social Sciences

	Ν	Min.	Max.	Mean	Std. Dev
CAT Total Score	114	3.00	30.00	14.75	6.21



#### CAT Demographics: Descriptive Statistics for Sample

		Freq.	Freq. %
Gender	Male	38	33.9%
Gender	Female	74	66.1%
	Freshman	0	0.0%
Class	Sophomore	6	5.4%
Standing	Junior	31	27.7%
	Senior	75	67.0%
Class	Undergraduate	105	100.0%
Class	Graduate	0	0.0%
	≤ 20 years	16	14.2%
Age	21-25 years	90	79.6%
	≥ 26 years	7	6.2%

		Freq.	Freq. %
	Excellent	86	75.4%
Proficiency	Very Good	21	18.4%
with the English	Good	7	6.1%
Language*	Fair	0	0.0%
	Poor	0	0.0%

\* Self-rated

		Freq.	Freq. %
	White	70	61.4%
	Black or African American	29	25.4%
Race**	American Indian or Alaska Native	4	3.5%
Race	Asian	3	2.6%
	Native Hawaiian or Other Pacific Islander	0	0.0%
	Other Race	11	9.6%

\*\*The cumulative percent may exceed 100% as students are allowed to select more than one category.

	Freq.	Freq. %
Spanish/Hispanic/Latino Ethnicity	21	18.4%
Considered English primary language?	110	96.5%

### CAT Breakdown: Frequency of Points Awarded for Each Question

## Sam Houston State University: August 2016 - College of Humanities and Social Sciences

	Skill Assessed by CAT Question	Points Awarded	Freq.	Freq. %
Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0	31	27.2%
<u> </u>		1	83	72.8%
		0	42	36.8%
Q2	Evaluate how strongly correlational-type data supports a hypothesis.	1	34	29.8%
QZ		2	22	19.3%
		3	16	14.0%
			57	50.0%
Q3	Provide alternative explanations for a pattern of results that has many possible	1	27	23.7%
	causes.	2	21	18.4%
		3	9	7.9%
		0	57	50.0%
		1	30	26.3%
Q4	Identify additional information needed to evaluate a hypothesis.	2	18	15.8%
		3	5	4.4%
		4	4	3.5%
Q5	Evaluate whether spurious information strongly supports a hypothesis.	0	32	28.3%
20		1	81	71.7%
l I		0	20	17.5%
Q6	Provide alternative explanations for spurious associations.	1	39	34.2%
30		2	46	40.4%
		3	9	7.9%
		0	80	70.2%
Q7	Identify additional information needed to evaluate a hypothesis.	1	29	25.4%
		2	5	4.4%
Q8	Determine whether an invited inference is supported by specific information.	0	47	41.2%
90		1	67	58.8%
		0	61	53.5%
Q9	Provide relevant alternative interpretations for a specific set of results.	1	40	35.1%
		2	13	11.4%
		0	4	3.5%
		1	5	4.4%
Q10	Separate relevant from irrelevant information when solving a real-world problem.	2	25	21.9%
		3	38	33.3%
		4	42	36.8%
		0	50	43.9%
Q11	Use and apply relevant information to evaluate a problem.	1	51	44.7%
		2	13	11.4%
Q12	Use basic mathematical skills to help solve a real-world problem.	0	36	31.6%
		1	78	68.4%
		0	48	42.5%
Q13	Identify suitable solutions for a real-world problem using relevant information.	1	35	31.0%
		2	16	14.2%
		3	14	12.4%
		0	47	41.2%
		1	18	15.8%
Q14	Identify and explain the best solution for a real-world problem using relevant	2	5	4.4%
	information.	3	11	9.6%
		4	23	20.2%
		5	10	8.8%
		0	72	63.2%
Q15	Explain how changes in a real-world problem situation might affect the solution.	1	24	21.1%
		2	14	12.3%
		3	4	3.5%

					Institutional/Departmental Profile		
			Sam H	oust	on State University: August 2016 - College of Humanities and Socia	al Sciences	
Evaluate and			Effective			Institution/	Department
Interpret Info	Solving	Thinking	Comm.		Skill Assessed by CAT Question	Mean	Avg. % of Attainable Points
х				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.73	73%
х			х	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	1.11	37%
		х	х	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.84	28%
	х	х	х	Q4	Identify additional information needed to evaluate a hypothesis.	0.85	21%
х				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.72	72%
		х	х	Q6	Provide alternative explanations for spurious associations.	1.39	46%
	х	х	х	Q7	Identify additional information needed to evaluate a hypothesis.	0.34	17%
х				Q8	Determine whether an invited inference is supported by specific information.	0.59	59%
		х	х	Q9	Provide relevant alternative interpretations for a specific set of results.	0.58	29%
х	х			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.96	74%
х	х		х	Q11	Use and apply relevant information to evaluate a problem.	0.68	34%
	х			Q12	Use basic mathematical skills to help solve a real-world problem.	0.68	68%
х	х			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.96	32%
х	х		Х	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.78	36%
	Х	х	х	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.56	19%
					CAT Total Score	14.75	39%

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.

					Upper Division CAT Means Comparison Report				
			Sam Ho	ousto	n State University: August 2016 - College of Humanities and	Social Sci	ences		
Evaluate and	Problem	Creative	Effective		Skill Assessed by CAT Question	Institution			
Interpret Info	Solving	Thinking	Comm.		Skill Assessed by CAT Question	Mean	Mean	Probability of difference <sup>a</sup>	Effect Size <sup>b</sup>
Х				Q1	Summarize the pattern of results in a graph without making inappropriate inferences.	0.73	0.67		
х			х	Q2	Evaluate how strongly correlational-type data supports a hypothesis.	1.11	1.21		
		х	Х	Q3	Provide alternative explanations for a pattern of results that has many possible causes.	0.84	1.35	***	50
	х	х	х	Q4	Identify additional information needed to evaluate a hypothesis.	0.85	1.41	***	48
х				Q5	Evaluate whether spurious information strongly supports a hypothesis.	0.72	0.73		
		х	х	Q6	Provide alternative explanations for spurious associations.	1.39	1.56	*	20
	х	х	х	Q7	Identify additional information needed to evaluate a hypothesis.	0.34	0.82	***	77
х				Q8	Determine whether an invited inference is supported by specific information.	0.59	0.68	*	20
		х	х	Q9	Provide relevant alternative interpretations for a specific set of results.	0.58	0.93	***	49
Х	х			Q10	Separate relevant from irrelevant information when solving a real-world problem.	2.96	3.14	*	19
х	х		х	Q11	Use and apply relevant information to evaluate a problem.	0.68	1.11	***	66
	х			Q12	Use basic mathematical skills to help solve a real-world problem.	0.68	0.82	***	31
х	х			Q13	Identify suitable solutions for a real-world problem using relevant information.	0.96	1.18	*	21
х	х		х	Q14	Identify and explain the best solution for a real-world problem using relevant information.	1.78	2.29	**	28
	х	х	х	Q15	Explain how changes in a real-world problem situation might affect the solution.	0.56	1.15	***	61
					CAT Total Score	14.75	19.04	***	70

a. \* p<.05 \*\*p<.01 \*\*\*p<.001 (2 -tailed) Does not Account for entering ACT/SAT.

<sup>b</sup>. Mean difference divided by pooled group standard deviation.

(0.1 - 0.3 = small effect; 0.3 - 0.5 = moderate effect; >0.5 = large effect)

The map of skills covered by each question above is a suggested theoretical guide for interpreting results.