

# IOWA STATE UNIVERSITY

OF SCIENCE AND TECHNOLOGY

## **Interpretation of Entering Student's Test Scores**

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**Institutional Research Report 2011-3  
May 2011**

**To be used for the 2011-2012 school year.**

**Revised each spring for use during the  
following summer and fall orientation.**

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# INTERPRETATION OF ENTERING STUDENT'S TEST SCORES

May 2011

## To be used for the 2011-2012 School Year

This report provides information about Iowa State University students for use by academic advisers, Student Counseling Service personnel, and admissions counselors. The report presents results from analyses by the Office of Institutional Research of high school rank (HSR) and American College Testing (ACT) test scores for all freshmen who entered fall semester 2010 and earned 11.5 credit hours or more during that semester.

### NORMS FOR NEW STUDENTS

#### High School Rank

Norms in this measure are based on the ranks of 3,465 new full-time freshman students entering from high school and earning 11.5 or more credits during fall 2010.

Mean = 76.64; standard deviation = 16.12

Raw Score	Percentile	Raw Score	Percentile	Raw Score	Percentile
				52	9
99	99	75	43	51	8
98	95	74	41	50	7
97	93	73	39	49	7
96	91	72	37	48	6
95	88	71	35	47	5
94	85	70	34	46	5
93	83	69	32	45	4
92	80	68	30	44	3
91	78	67	28	43	3
90	76	66	27	42	3
89	73	65	26	41	2
88	71	64	24	40	2
87	69	63	22	39	2
86	67	62	21	38	2
85	65	61	20	37	1
84	63	60	18	36	1
83	60	59	17	35	1
82	58	58	15	34	1
81	56	57	14	33	1
80	54	56	13	32	1
79	51	55	11	31	1
78	50	54	11	30 &	1
77	47	53	10	Below	
76	45				

## ACT English, Mathematics, Reading, Science Reasoning, and Composite Scores

The average scores of Iowa State University's new freshman students are compared below with national average scores for all ACT-tested students entering Ph.D. granting universities. Averages are as follows:

	<b>ISU Fall 2010</b>	<b>National (Ph.D.) 2009-2010</b>
English	24.3	24.2
Mathematics	24.8	24.1
Reading	24.9	24.6
Science	24.6	23.5
Composite	24.8	24.2

Norms in these measures are based on the scores of 3,227 full-time freshman students entering from high school and earned 11.5 or more credits during fall 2010.

### Percentile Ranks for Enhanced ACT Scores

<b>Raw Score</b>	<b>English</b>	<b>Math</b>	<b>Reading</b>	<b>Science Reasoning</b>	<b>Composite</b>
36	99	99	99	99	99
35	99	99	99	99	99
34	97	98	97	98	99
33	95	96	94	96	98
32	93	93	91	94	96
31	90	89	87	93	94
30	87	87	82	90	90
29	82	82	75	87	85
28	78	77	69	81	78
27	72	70	63	76	71
26	67	62	57	68	63
25	59	53	51	59	54
24	50	44	44	47	44
23	42	34	38	37	35
22	34	26	31	27	26
21	26	20	24	20	18
20	18	17	19	12	12
19	13	13	12	6	7
18	9	9	9	4	3
17	7	6	7	2	2
16	5	3	4	1	1
15	3	1	3	1	1
14	1	1	2	1	1
13 & Below	1	1	1	1	1

## ACT Score Equivalents for SAT Scores

The typical ISU new freshman submits ACT scores as part of the admissions process. Some students, however, submit SAT scores instead. These SAT scores need to be converted to ACT equivalents before they can be interpreted using norms in this document. The following concordance table is used for students at all Iowa Regent Universities.

### *Caution:*

In cases where a student has both SAT and ACT scores, placement recommendations should be made using ACT scores only. SAT scores should only be used for placement in cases where ACT scores are not available. The ACT Assessment and SAT test are based on different content and psychometric specifications. Converted scores will contain more measurement error than actual scores, thus overly precise judgments should not be made based on converted scores.

### SAT/ACT Concordance Tables

ACT Composite	SAT Critical Reading and Math Combined Score
1-8	400
9	430
10	470
11	500
12	520
13	590
14	660
15	710
16	760
17	810
18	860
19	900
20	940
21	980
22	1020
23	1060
24	1090
25	1130
26	1170
27	1210
28	1240
29	1280
30	1320
31	1360
32	1410
33	1460
34	1510
35	1560
36	1600

## **PLACEMENT GUIDELINES**

Many academic advisers receive a variety of information from their college regarding placement of students into beginning level courses. *Such college information supersedes any information in this report and should be used when available.*

### **Placement of Students in English Courses**

Recommendations for placement of students into beginning English courses are provided by the Department of English at <http://engl.iastate.edu/resources/fc/150placement.html/>.

### **Placement of Students in Mathematics Courses**

Recommendations for placement of students into mathematics courses are provided by the Department of Mathematics at <http://orion.math.iastate.edu/placement/>.

### **Placement of Students in Chemistry Courses**

Recommendations for placement of students into Chemistry courses are provided by the Department of Chemistry at <http://www.chem.iastate.edu/undergrad/placement.html>.