Maximum Goal Differential = 7

RANK TEAM W L T GmPerf Sched Total Last 5

 1,Lindenwood,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 0 1, 4.1, 9.3, 13.40, 12.29

 2,Minot State,\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 2 1, 2.9, 9.8, 12.68, 11.50

 3,Iowa State,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 2 2, 2.9, 8.8, 11.72, 12.39

 4,Liberty,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 4 1, 2.6, 8.9, 11.42, 11.88

 5,Adrian,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 4 1, 3.5, 7.8, 11.27, 11.85

 6,Nevada-Las Vegas,\_\_\_\_\_\_\_\_\_ 14 3 2, 1.7, 9.2, 10.92, 11.43

 7,Central Oklahoma,\_\_\_\_\_\_\_\_\_ 15 4 1, 2.3, 8.0, 10.31, 10.25

 8,Maryville,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 5 3, 1.6, 8.6, 10.15, 11.47

 9,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 2 0, 3.2, 6.7, 9.89, 10.01

 10,Stony Brook,\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 4 2, 2.5, 7.4, 9.85, 8.59

 11,Jamestown,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 6 2, 0.1, 9.7, 9.81, 10.85

 12,Illinois,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 12 1, -0.0, 9.7, 9.68, 10.59

 13,Missouri State,\_\_\_\_\_\_\_\_\_\_\_ 14 6 0, 1.1, 8.5, 9.67, 8.07

 14,Ohio,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 7 2, 1.7, 7.9, 9.65, 8.95

 15,Michigan-Dearborn,\_\_\_\_\_\_\_\_ 12 6 2, 1.4, 7.5, 8.93, 9.07

 16,Arizona,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 5 2, 0.9, 8.0, 8.90, 9.55

 17,Pittsburgh,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 3 2, 2.1, 6.8, 8.89, 8.98

 18,Aquinas,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 4 1, 1.9, 6.5, 8.35, 7.95

 19,Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 7 3, -0.4, 8.7, 8.29, 8.37

 20,Niagara,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 14 3 4, 2.6, 5.7, 8.24, 8.03

 21,Midland,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 9 2, -0.1, 8.2, 8.19, 7.95

 22,Lawrence Tech,\_\_\_\_\_\_\_\_\_\_\_\_ 11 6 2, 1.4, 6.5, 7.89, 7.34

 23,Illinois State,\_\_\_\_\_\_\_\_\_\_\_ 12 10 0, 0.1, 7.6, 7.76, 7.17

 24,Arizona State,\_\_\_\_\_\_\_\_\_\_\_\_ 5 12 0, -1.5, 9.2, 7.72, 6.07

 25,Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 8 2, 0.6, 7.1, 7.69, 9.32

 26,Delaware,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 6 5, 0.4, 7.2, 7.60, 7.87

 27,Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 8 5, -0.8, 8.3, 7.58, 7.19

 28,Davenport,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 7 1, 0.6, 6.9, 7.48, 6.54

 29,Grand Canyon,\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 2, -1.8, 8.9, 7.16, 7.63

 30,Oklahoma,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 11 3, -0.9, 8.0, 7.08, 6.32

 31,Colorado State,\_\_\_\_\_\_\_\_\_\_\_ 1 11 4, -1.9, 8.8, 6.95, 7.09

 32,Alabama,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 6 2, -0.5, 7.4, 6.86, 5.87

 33,Robert Morris,\_\_\_\_\_\_\_\_\_\_\_\_ 13 4 4, 1.3, 5.5, 6.83, 7.47

 34,Waldorf,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 11 1, -1.1, 7.7, 6.59, 7.35

 35,New York,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 6 4, 0.2, 6.3, 6.50, 5.56

 36,Oswego State,\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 5 4, 0.6, 5.8, 6.47, 4.77

 37,Drexel,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 7 6, -0.9, 7.3, 6.44, 6.32

 38,John Carroll,\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 5 2, 0.9, 5.5, 6.35, 7.84

 39,Navy,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 8 4, -0.2, 6.4, 6.27, 6.79

 40,Indiana Pennsylvania,\_\_\_\_\_ 12 6 3, 0.4, 5.8, 6.20, 6.86

 41,Grand Valley State,\_\_\_\_\_\_\_ 8 12 2, -0.6, 6.6, 5.96, 6.80

 42,William Paterson,\_\_\_\_\_\_\_\_\_ 9 4 1, 0.9, 5.0, 5.92, 5.90

 43,Villanova,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 4 3, 0.3, 5.6, 5.86, 3.89

 44,Concordia Ann Arbor,\_\_\_\_\_\_ 5 10 2, -1.2, 6.9, 5.71, 6.19

 45,Kent State,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 7 2, 0.8, 4.6, 5.48, 5.18

 46,West Chester,\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 4 2, 0.8, 4.6, 5.47, 5.55

 47,Calvin,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 5 2, 0.6, 4.8, 5.41, 4.98

 48,Buffalo,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 9 3, -0.5, 5.9, 5.38, 5.13

 49,McKendree,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 11 1, -3.1, 8.2, 5.01, 5.02

 50,Roosevelt,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 15 1, -3.8, 8.7, 4.92, 4.72

 51,Lehigh,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 9 2, -0.6, 5.4, 4.76, 4.31

 52,Rutgers,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 9 1, -1.1, 5.8, 4.72, 5.23

 53,Cleary,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 14 1, -2.4, 7.1, 4.65, 5.62

 54,Toledo,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 7 1, -0.6, 5.1, 4.48, 6.26

 55,Temple,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 7 2, -0.6, 5.0, 4.44, 4.92

 56,Northern Illinois,\_\_\_\_\_\_\_\_ 2 13 1, -2.6, 7.1, 4.43, 4.21

 57,Western Michigan,\_\_\_\_\_\_\_\_\_ 5 12 2, -1.3, 5.5, 4.20, 2.82

 58,West Virginia,\_\_\_\_\_\_\_\_\_\_\_\_ 7 13 1, -1.8, 5.9, 4.16, 4.92

 59,Syracuse,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 14 1, -3.7, 7.6, 3.89, 3.16

 60,Canisius,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 15 4, -2.0, 5.8, 3.89, 3.67

 61,George Mason,\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 2, -1.9, 5.5, 3.60, 3.92

 62,Towson,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 9 0, -1.3, 4.8, 3.57, 3.71

 63,Duquesne,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 11 4, -1.6, 5.1, 3.52, 3.88

 64,Mercyhurst,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 15 3, -2.6, 6.0, 3.40, 1.64

 65,Rochester Inst of Tech,\_\_\_ 0 4 2, -2.7, 5.9, 3.25, 3.25

 66,Rochester,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 14 0, -4.8, 7.1, 2.27, 1.90

 67,Oakland,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 8 1, -4.1, 5.5, 1.37, 0.76

 68,Eastern Michigan,\_\_\_\_\_\_\_\_\_ 0 10 1, -4.9, 5.3, 0.40, 1.13

**Maximum Goal Differential = 1 (i.e. just considers W, L, T and schedule strength)**

**RANK TEAM W L T GmPerf Sched Total Last 5**

 **1,Lindenwood,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 0 1, 0.9, 7.5, 8.39, 8.17**

 **2,Minot State,\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 2 1, 0.6, 7.5, 8.18, 7.77**

 **3,Nevada-Las Vegas,\_\_\_\_\_\_\_\_\_ 14 3 2, 0.6, 7.5, 8.05, 8.23**

 **4,Iowa State,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 2 2, 0.7, 7.3, 8.01, 7.94**

 **5,Liberty,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 4 1, 0.5, 7.4, 7.90, 7.76**

 **6,Central Oklahoma,\_\_\_\_\_\_\_\_\_ 15 4 1, 0.6, 7.1, 7.70, 7.78**

 **7,Missouri State,\_\_\_\_\_\_\_\_\_\_\_ 14 6 0, 0.4, 7.2, 7.64, 7.14**

 **8,Adrian,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 4 1, 0.5, 7.1, 7.61, 7.69**

 **9,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 2 0, 0.8, 6.8, 7.58, 7.71**

 **10,Pittsburgh,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 3 2, 0.5, 7.0, 7.57, 7.70**

 **11,Maryville,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 5 3, 0.3, 7.3, 7.57, 7.68**

 **12,Jamestown,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 6 2, 0.1, 7.5, 7.53, 7.75**

 **13,Illinois,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 12 1, -0.1, 7.6, 7.51, 8.09**

 **14,Ohio,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 7 2, 0.3, 7.2, 7.49, 7.74**

 **15,Stony Brook,\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 4 2, 0.4, 7.0, 7.48, 6.90**

 **16,Arizona,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 5 2, 0.3, 7.2, 7.48, 8.02**

 **17,Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 7 3, -0.1, 7.4, 7.34, 7.44**

 **18,Michigan-Dearborn,\_\_\_\_\_\_\_\_ 12 6 2, 0.3, 7.0, 7.30, 7.57**

 **19,Niagara,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 14 3 4, 0.5, 6.8, 7.27, 7.15**

 **20,Aquinas,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 4 1, 0.4, 6.8, 7.22, 7.32**

 **21,Robert Morris,\_\_\_\_\_\_\_\_\_\_\_\_ 13 4 4, 0.4, 6.8, 7.22, 7.34**

 **22,Delaware,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 6 5, 0.1, 7.0, 7.19, 7.48**

 **23,Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 8 2, 0.1, 7.0, 7.19, 7.58**

 **24,Midland,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 9 2, 0.0, 7.2, 7.16, 7.18**

 **25,Illinois State,\_\_\_\_\_\_\_\_\_\_\_ 12 10 0, 0.1, 7.0, 7.13, 6.86**

 **26,Indiana Pennsylvania,\_\_\_\_\_ 12 6 3, 0.3, 6.8, 7.13, 7.18**

 **27,Arizona State,\_\_\_\_\_\_\_\_\_\_\_\_ 5 12 0, -0.4, 7.5, 7.10, 6.65**

 **28,John Carroll,\_\_\_\_\_\_\_\_\_\_\_\_\_ 12 5 2, 0.4, 6.7, 7.10, 7.47**

 **29,Lawrence Tech,\_\_\_\_\_\_\_\_\_\_\_\_ 11 6 2, 0.3, 6.8, 7.10, 6.69**

 **30,Davenport,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 7 1, 0.2, 6.9, 7.06, 7.18**

 **31,Grand Canyon,\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 2, -0.4, 7.4, 7.01, 6.98**

 **32,Oswego State,\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 5 4, 0.2, 6.8, 7.00, 6.47**

 **33,West Chester,\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 4 2, 0.4, 6.6, 6.97, 7.04**

 **34,William Paterson,\_\_\_\_\_\_\_\_\_ 9 4 1, 0.4, 6.6, 6.97, 6.81**

 **35,New York,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 6 4, 0.1, 6.9, 6.96, 6.61**

 **36,Alabama,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 6 2, -0.1, 7.0, 6.96, 6.44**

 **37,Drexel,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 7 6, -0.1, 7.1, 6.94, 7.26**

 **38,Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 8 5, -0.2, 7.2, 6.94, 6.85**

 **39,Villanova,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 4 3, 0.2, 6.7, 6.89, 6.56**

 **40,Buffalo,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 9 3, 0.0, 6.8, 6.86, 6.92**

 **41,Navy,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 8 4, -0.2, 7.0, 6.80, 6.86**

 **42,Kent State,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 7 2, 0.2, 6.6, 6.73, 6.92**

 **43,Colorado State,\_\_\_\_\_\_\_\_\_\_\_ 1 11 4, -0.6, 7.3, 6.69, 6.58**

 **44,Oklahoma,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 11 3, -0.5, 7.2, 6.69, 6.52**

 **45,Grand Valley State,\_\_\_\_\_\_\_ 8 12 2, -0.2, 6.8, 6.65, 6.61**

 **46,Roosevelt,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 15 1, -0.7, 7.3, 6.62, 6.55**

 **47,Waldorf,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 11 1, -0.4, 7.1, 6.61, 6.50**

 **48,Calvin,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 5 2, 0.1, 6.5, 6.61, 6.58**

 **49,West Virginia,\_\_\_\_\_\_\_\_\_\_\_\_ 7 13 1, -0.3, 6.9, 6.59, 6.92**

 **50,Concordia Ann Arbor,\_\_\_\_\_\_ 5 10 2, -0.3, 6.9, 6.58, 6.59**

 **51,Temple,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 7 2, -0.1, 6.6, 6.58, 6.80**

 **52,McKendree,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 11 1, -0.6, 7.2, 6.51, 6.65**

 **53,Towson,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 9 0, -0.2, 6.7, 6.46, 6.32**

 **54,Canisius,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 15 4, -0.5, 6.9, 6.42, 6.46**

 **55,George Mason,\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 2, -0.4, 6.8, 6.39, 6.56**

 **56,Duquesne,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 11 4, -0.4, 6.7, 6.37, 6.41**

 **57,Toledo,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 7 1, -0.3, 6.6, 6.36, 6.94**

 **58,Cleary,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 14 1, -0.6, 7.0, 6.35, 6.30**

 **59,Rutgers,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 9 1, -0.6, 6.9, 6.30, 6.25**

 **60,Lehigh,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 9 2, -0.5, 6.8, 6.27, 6.12**

 **61,Western Michigan,\_\_\_\_\_\_\_\_\_ 5 12 2, -0.4, 6.6, 6.26, 5.96**

 **62,Northern Illinois,\_\_\_\_\_\_\_\_ 2 13 1, -0.7, 6.9, 6.25, 6.63**

 **63,Syracuse,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 14 1, -0.9, 7.2, 6.23, 6.07**

 **64,Rochester Inst of Tech,\_\_\_ 0 4 2, -0.7, 6.9, 6.19, 6.18**

 **65,Mercyhurst,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 15 3, -0.7, 6.9, 6.19, 5.92**

 **66,Rochester,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 14 0, -1.0, 6.9, 5.94, 6.18**

 **67,Oakland,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 8 1, -0.9, 6.7, 5.82, 5.76**

 **68,Eastern Michigan,\_\_\_\_\_\_\_\_\_ 0 10 1, -0.9, 6.6, 5.68, 5.54**

 **The program starts all teams with an equal arbitrary value and then**

**adjusts them all recursively based on game scores until the lowest cumulative**

**error between expected goal differentials and actual goal differentials is**

**reached (convergence). One effect often noticed is that a team's rating can**

**change slightly without playing due to previous opponents playing which affects**

**their rating and their opponent's rating, etc.**

 **The Total column is in goal units and the difference in this value between**

**any two teams is the predicted goal differential for a game played at a**

**neutral site between those two teams.**

 **It should be noted that these rankings are an average performance value**

**for each team for the entire season, all games are equally weighted, so a team's**

**latest game may make up only 1/40th of a teams rating at the end of the season.**

 **Actually, there are two different rankings listed below. The first is as described**

**above with the maximum goal differential used per game set at 7.**

 **This ordering ends up similar to** [**CCHP**](https://www.google.com/url?q=http://rpihockey.net/misc.rank1.shtml&source=gmail-html&ust=1641336627559000&usg=AOvVaw25cpAu8daEqhHUh7qkABf7)**, although differences do arise due to CCHP**

**considering home ice advantage and CCHP not using a goal differential limit.**

 **The second ranking sets maximum goal differential at 1, thereby just considering**

**whether the game was won, lost, or tied (and strength of opponent). Note that the Total column**

**in the GD=1 ranking is therefore in win percentage units rather than goal units. A rated .01**

**ahead of B can be interpreted as saying that if these two teams played exclusively against**

**each other, A's predicted winning percentage is 1 percentage point higher than B's**

**(i.e. A's predicted winning percentage vs. B would be .495, B's against**

**A would be .505). However, since the teams do not play exclusively against the other it**

**is actually a little bit more complex than above as teams can be ranked as high as 1.0**

**above their average opponent (if they were undefeated and untied) and as low as 1.0**

**below their average opponent (if they lost all of their games).**

**Not surprisingly, the ordering ends up very similar to** [**KRACH**](https://www.google.com/url?q=http://rpihockey.net/misc.rank1.shtml&source=gmail-html&ust=1641336627559000&usg=AOvVaw25cpAu8daEqhHUh7qkABf7)**.**

 **Currently, teams with as few as 3 scores are ranked. The more games that go**

**into a team's ranking, the more accurate their ranking will be.**