Maximum Goal Differential = 7

RANK TEAM W L T GmPerf Sched Total Last 5

 1,Liberty University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 15 0 0, 4.2, 8.8, 13.03, 12.30

 2,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 17 6 0, 3.0, 7.7, 10.66, 11.44

 3,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 15 4 0, 2.3, 8.0, 10.30, 11.39

 4,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 6 1, 2.3, 7.6, 9.97, 11.14

 5,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 6 1, 1.6, 7.9, 9.57, 8.89

 6,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 5 0, 0.5, 9.1, 9.56, 10.70

 7,University of Massachusetts-Amherst,\_\_\_\_\_\_ 12 4 0, 2.2, 6.8, 9.00, 8.73

 8,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 5 0, 0.5, 8.3, 8.85, 7.61

 9,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 10 1, 1.0, 7.8, 8.84, 10.08

 10,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 8 0, 0.2, 7.6, 7.83, 6.55

 11,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 6 0, 1.8, 5.9, 7.72, 7.31

 12,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 8 6 2, 0.5, 6.4, 6.88, 5.98

 13,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 6 2, -0.2, 6.8, 6.55, 6.81

 14,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 5 0, 0.6, 5.9, 6.51, 5.55

 15,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 8 3, 0.6, 5.7, 6.24, 6.74

 16,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 9 2, -0.1, 6.0, 5.98, 5.79

 17,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 9 7 1, 0.1, 5.7, 5.86, 6.27

 18,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 0, -2.3, 7.8, 5.43, 5.38

 19,University of Minnesota,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -4.8, 10.1, 5.22, 5.61

 20,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 10 2, -1.1, 6.1, 5.00, 4.56

 21,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 6 0, -0.3, 5.2, 4.91, 4.58

 22,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 8 0, -1.4, 5.1, 3.71, 4.15

 23,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 10 0, -3.2, 6.9, 3.65, 3.53

 24,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 17 0, -3.6, 6.7, 3.16, 3.18

 25,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 8 1, -3.7, 6.6, 2.93, 2.54

 26,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -7.0, 9.5, 2.49, 2.82

 27,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 10 0, -5.4, 5.0, -0.36, -0.22

 28,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 7 0, -7.0, 5.0, -2.04, -1.99

**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,Liberty University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 15 0 0, 1.0, 7.4, 8.40, 8.13**

 **2,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 5 0, 0.4, 7.4, 7.81, 7.86**

 **3,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 15 4 0, 0.6, 7.2, 7.75, 8.38**

 **4,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 17 6 0, 0.5, 7.2, 7.69, 7.63**

 **5,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 6 1, 0.4, 7.2, 7.59, 7.72**

 **6,University of Massachusetts-Amherst,\_\_\_\_\_\_ 12 4 0, 0.5, 6.9, 7.44, 7.34**

 **7,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 6 1, 0.2, 7.2, 7.41, 7.37**

 **8,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 5 0, 0.2, 7.2, 7.38, 7.20**

 **9,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 6 0, 0.4, 6.9, 7.22, 7.22**

 **10,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 10 1, 0.0, 7.2, 7.16, 7.34**

 **11,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 8 0, -0.1, 7.2, 7.01, 6.71**

 **12,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 8 6 2, 0.1, 6.9, 7.00, 6.90**

 **13,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 5 0, 0.2, 6.7, 6.96, 6.50**

 **14,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 6 2, 0.0, 6.9, 6.91, 7.24**

 **15,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 9 7 1, 0.1, 6.7, 6.83, 7.18**

 **16,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 8 3, -0.1, 6.8, 6.71, 6.48**

 **17,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 9 2, -0.1, 6.8, 6.69, 6.78**

 **18,University of Minnesota,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -1.0, 7.6, 6.64, 6.62**

 **19,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 0, -0.5, 7.1, 6.64, 6.81**

 **20,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -1.0, 7.4, 6.43, 6.51**

 **21,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 10 2, -0.4, 6.8, 6.39, 6.42**

 **22,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 8 0, -0.3, 6.7, 6.38, 6.53**

 **23,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 10 0, -0.7, 7.0, 6.32, 6.15**

 **24,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 6 0, -0.3, 6.6, 6.31, 6.09**

 **25,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 8 1, -0.7, 6.9, 6.19, 6.07**

 **26,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 17 0, -0.8, 6.9, 6.12, 6.02**

 **27,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 10 0, -0.8, 6.6, 5.75, 5.91**

 **28,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 7 0, -1.0, 6.6, 5.62, 5.66**

 **- \* in place of rank indicates team whose rank is based on fewer than 3 scores.**

 **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.**

 **Games that go to shootouts for decision are considered ties for ratings purposes.**

 **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://www.uafhockey.com/hratings.html&source=gmail-html&ust=1643306670969000&usg=AOvVaw315sqZHpsxMjoS_Ap-K3fU)**, 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=1643306670969000&usg=AOvVaw19T6tYqvm_dWJnJ7cysM3R)**.**

 **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.**