Maximum Goal Differential = 7

RANK TEAM W L T GmPerf Sched Total Last 5

 1,Liberty University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 0 0, 3.3, 9.9, 13.20, 13.56

 2,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 2 0, 2.2, 9.1, 11.39, 11.99

 3,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 4 1, 1.0, 9.2, 10.19, 9.97

 4,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 2 0, 1.9, 8.3, 10.16, 9.75

 5,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 3 1, 2.0, 7.8, 9.76, 9.63

 6,University of Massachusetts-Amherst,\_\_\_\_\_\_ 4 0 0, 4.5, 5.2, 9.71

 7,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 3 0, 0.4, 8.9, 9.29, 9.66

 8,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 2 0, 1.0, 8.1, 9.11, 9.02

 9,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 7 0, 0.9, 7.6, 8.57, 7.37

 10,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 5 0, 0.5, 8.0, 8.52, 8.00

 11,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 3 0, 2.8, 5.0, 7.83, 7.93

 12,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 6 2, -1.3, 7.7, 6.37, 6.09

 13,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 5 2 0, 1.4, 4.9, 6.32, 7.06

 14,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 2 2, 1.1, 4.8, 5.93, 6.17

 15,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 1 0, 1.0, 4.9, 5.86, 5.86

 16,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 4 0, -4.3, 9.7, 5.48

 17,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 4 1, -2.0, 7.4, 5.42, 5.43

 18,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 1 3 1, -1.4, 6.7, 5.30, 5.30

 19,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 6 0, -1.2, 6.4, 5.13, 4.41

 20,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 3 0, 0.2, 4.7, 4.93, 4.93

 21,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 7 0, -2.6, 6.8, 4.23, 5.03

 22,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 2 0, 0.0, 4.0, 3.96

 23,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 5 0, -1.7, 5.2, 3.44, 3.36

 24,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 3 0, -2.2, 5.1, 2.89

 25,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 4 0, -7.0, 9.1, 2.14

 26,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 3 0, -2.7, 2.9, 0.14

 27,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 6 0, -7.0, 5.3, -1.74, -1.97

**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,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 0 0, 1.0, 7.7, 8.73, 8.68**

 **2,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 2 0, 0.5, 7.5, 8.00, 8.18**

 **3,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 3 0, 0.5, 7.4, 7.87, 8.10**

 **4,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 3 1, 0.4, 7.2, 7.59, 7.54**

 **5,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 2 0, 0.3, 7.2, 7.53, 7.40**

 **6,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 2 0, 0.4, 7.1, 7.53, 7.15**

 **7,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 4 1, 0.1, 7.4, 7.46, 7.37**

 **8,University of Massachusetts-Amherst,\_\_\_\_\_\_ 4 0 0, 1.0, 6.3, 7.31**

 **9,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 1 0, 0.6, 6.6, 7.22, 7.22**

 **10,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 5 0, -0.3, 7.5, 7.20, 7.14**

 **11,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 7 0, -0.1, 7.3, 7.18, 6.98**

 **12,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 3 0, 0.5, 6.6, 7.04, 6.97**

 **13,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 5 2 0, 0.4, 6.6, 7.03, 7.42**

 **14,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 4 1, -0.5, 7.2, 6.70, 6.64**

 **15,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 1 3 1, -0.4, 7.1, 6.66, 6.66**

 **16,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 6 0, -0.3, 6.9, 6.62, 6.35**

 **17,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 6 2, -0.4, 7.0, 6.61, 6.50**

 **18,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 2 2, 0.1, 6.4, 6.57, 6.78**

 **19,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 7 0, -0.6, 7.1, 6.55, 6.73**

 **20,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 4 0, -1.0, 7.5, 6.45**

 **21,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 4 0, -1.0, 7.4, 6.40**

 **22,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 2 0, 0.0, 6.3, 6.27**

 **23,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 3 0, -0.2, 6.4, 6.17, 6.17**

 **24,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 3 0, -0.5, 6.7, 6.15**

 **25,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 5 0, -0.4, 6.5, 6.10, 5.94**

 **26,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 3 0, -0.5, 6.0, 5.48**

 **27,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 6 0, -1.0, 6.5, 5.47, 5.44**

 **- \* 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=1641008284163000&usg=AOvVaw0BtNcX9JKmsx33Dn-Uv-gF)**, 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=1641008284163000&usg=AOvVaw1LIycXEVDJnbwls6i8wuyO)**.**

 **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.**