Maximum Goal Differential = 7

RANK TEAM W L T GmPerf Sched Total Last 5

 1,Liberty University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 0 0, 4.5, 8.6, 13.02, 13.05

 2,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 6 0, 2.8, 7.6, 10.37, 10.31

 3,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 4 1, 2.8, 7.0, 9.84, 11.74

 4,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 4 0, 2.2, 7.5, 9.69, 9.35

 5,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 5 0, 0.5, 9.0, 9.46, 10.29

 6,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 3 0, 1.4, 7.9, 9.34, 9.17

 7,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 6 1, 1.6, 7.7, 9.31, 8.64

 8,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 8 1, 1.3, 7.6, 8.90, 10.69

 9,University of Massachusetts-Amherst,\_\_\_\_\_\_ 9 4 0, 1.6, 7.3, 8.88, 8.92

 10,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 6 0, 1.2, 6.6, 7.82, 8.05

 11,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 8 0, 0.2, 7.6, 7.77, 6.52

 12,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 6 5 2, 0.5, 6.4, 6.91, 7.03

 13,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 3 0, 0.9, 5.8, 6.75, 7.60

 14,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 6 1, -0.5, 7.0, 6.44, 6.93

 15,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 8 3, -0.3, 6.5, 6.23, 6.83

 16,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 7 2, 0.1, 5.9, 5.93, 4.95

 17,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 7 6 1, 0.1, 5.7, 5.74, 5.42

 18,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 0, -2.3, 7.7, 5.37, 5.43

 19,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 8 1, -1.1, 6.0, 4.94, 4.60

 20,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 6 0, -0.3, 5.1, 4.81, 4.54

 21,University of Minnesota,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -4.8, 9.6, 4.73, 5.14

 22,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 8 0, -3.1, 6.9, 3.76, 3.48

 23,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 7 0, -1.7, 5.3, 3.64, 3.90

 24,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 15 0, -3.7, 6.8, 3.09, 2.44

 25,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 8 1, -3.7, 6.6, 2.86, 2.51

 26,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -7.0, 9.3, 2.33, 2.64

 27,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 6 0, -4.4, 3.8, -0.59, -0.31

 28,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 6 0, -7.0, 5.1, -1.86, -2.02

**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,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 0 0, 1.0, 7.4, 8.37, 8.04**

 **2,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 13 5 0, 0.4, 7.4, 7.80, 7.71**

 **3,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 6 0, 0.5, 7.2, 7.64, 7.48**

 **4,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 16 4 1, 0.6, 7.0, 7.61, 8.05**

 **5,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 3 0, 0.4, 7.2, 7.55, 7.40**

 **6,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 4 0, 0.5, 7.0, 7.50, 7.82**

 **7,University of Massachusetts-Amherst,\_\_\_\_\_\_ 9 4 0, 0.4, 7.1, 7.44, 7.49**

 **8,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 6 1, 0.2, 7.1, 7.29, 7.23**

 **9,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 10 8 1, 0.1, 7.2, 7.26, 7.79**

 **10,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 6 0, 0.3, 6.9, 7.23, 7.52**

 **11,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 3 0, 0.4, 6.8, 7.18, 7.21**

 **12,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 6 8 0, -0.1, 7.2, 7.03, 6.73**

 **13,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 6 5 2, 0.1, 6.9, 6.97, 6.90**

 **14,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 7 6 1, 0.1, 6.8, 6.84, 7.02**

 **15,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 6 1, -0.2, 7.0, 6.80, 6.90**

 **16,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 8 3, -0.2, 6.9, 6.68, 6.67**

 **17,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 9 0, -0.5, 7.2, 6.65, 6.83**

 **18,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 7 2, -0.1, 6.7, 6.55, 6.36**

 **19,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 4 8 1, -0.3, 6.8, 6.50, 6.33**

 **20,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 8 0, -0.6, 7.1, 6.46, 6.46**

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

 **22,University of Minnesota,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 6 0, -1.0, 7.4, 6.43, 6.41**

 **23,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 7 0, -0.4, 6.7, 6.25, 6.09**

 **24,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 6 0, -0.3, 6.6, 6.23, 6.02**

 **25,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 15 0, -0.8, 7.0, 6.22, 6.03**

 **26,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 8 1, -0.7, 6.9, 6.21, 6.11**

 **27,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 6 0, -1.0, 6.6, 5.58, 5.58**

 **28,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 6 0, -0.7, 6.2, 5.52, 5.63**

 **- \* 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=1642789789363000&usg=AOvVaw3NnyJMVD0G61DsGDzdCxg8)**, 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=1642789789363000&usg=AOvVaw3-Ib6JZ6pIsgoQyA5A2feH)**.**

 **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.**