Maximum Goal Differential = 7

RANK TEAM W L T GmPerf Sched Total Last 5

 1,Liberty University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 0 0, 3.7, 9.7, 13.35, 13.77

 2,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 2 0, 2.9, 8.0, 10.93, 10.37

 3,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 3 1, 2.8, 7.0, 9.77, 10.22

 4,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 2 0, 3.0, 6.7, 9.67, 9.26

 5,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 2 0, 1.7, 7.9, 9.56, 9.57

 6,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 6 1, 0.6, 8.9, 9.49, 9.09

 7,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 3 0, 0.6, 8.8, 9.40, 10.19

 8,University of Massachusetts-Amherst,\_\_\_\_\_\_ 4 2 0, 1.3, 8.0, 9.29, 8.90

 9,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 7 1, 1.1, 7.5, 8.56, 7.42

 10,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 5 0, 0.8, 7.6, 8.41, 8.03

 11,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 3 0, 2.8, 4.9, 7.74, 7.91

 12,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 3 3 1, -0.3, 6.8, 6.52, 6.53

 13,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 1 0, 1.0, 5.2, 6.22, 5.76

 14,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 5 4 0, 0.9, 5.3, 6.15, 6.62

 15,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 5 1, -1.1, 7.2, 6.09, 6.27

 16,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 7 2, -1.1, 7.0, 5.88, 5.39

 17,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 5 3, -0.4, 6.2, 5.87, 5.83

 18,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 4 0, -0.3, 6.1, 5.85, 6.46

 19,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 8 0, -1.4, 6.8, 5.45, 5.81

 20,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 4 0, -4.3, 9.5, 5.28

 21,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 4 0, 0.1, 5.1, 5.24, 4.64

 22,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 9 0, -3.2, 6.7, 3.56, 3.19

 23,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 5 0, -0.8, 4.3, 3.55, 3.39

 24,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 5 0, -3.8, 7.3, 3.42, 3.88

 \* ,University of Minnesota,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 2 0, -7.0, 9.7, 2.67

 26,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 5 0, -7.0, 9.5, 2.45, 2.45

 27,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 4 0, -3.4, 3.1, -0.27, -0.27

 28,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 6 0, -7.0, 5.1, -1.91, -2.07

**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,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 0 0, 1.0, 7.7, 8.66, 8.63**

 **2,Adrian College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 2 0, 0.6, 7.3, 7.90, 7.64**

 **3,Lindenwood University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 11 3 0, 0.6, 7.3, 7.88, 8.15**

 **4,Indiana Tech,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 9 3 1, 0.5, 7.1, 7.54, 7.47**

 **5,University of Massachusetts-Amherst,\_\_\_\_\_\_ 4 2 0, 0.3, 7.2, 7.53, 7.56**

 **6,McKendree University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 2 0, 0.4, 7.1, 7.49, 7.24**

 **7,Minot State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 2 0, 0.6, 6.9, 7.42, 7.03**

 **8,Michigan State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 1 0, 0.7, 6.7, 7.32, 7.18**

 **9,Midland University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 6 1, -0.1, 7.4, 7.29, 7.26**

 **10,Miami University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 5 5 0, 0.0, 7.3, 7.26, 7.54**

 **11,Maryville University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 7 7 1, 0.0, 7.1, 7.12, 7.06**

 **12,University of Michigan-Dearborn,\_\_\_\_\_\_\_\_\_\_ 3 3 1, 0.0, 7.1, 7.06, 6.93**

 **13,Arizona State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 8 3 0, 0.5, 6.6, 7.03, 6.96**

 **14,University of Michigan,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2 5 1, -0.4, 7.2, 6.84, 6.97**

 **15,Grand Valley State University,\_\_\_\_\_\_\_\_\_\_\_\_ 5 4 0, 0.1, 6.7, 6.82, 6.95**

 **16,University of Rhode Island,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 4 0, -0.1, 6.8, 6.68, 6.80**

 **17,Grand Canyon University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 5 3, -0.2, 6.8, 6.59, 6.62**

 **18,Penn State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 4 0, -1.0, 7.5, 6.54**

 **19,University of Colorado,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 7 2, -0.3, 6.8, 6.52, 6.33**

 **20,Aquinas College,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 8 0, -0.5, 7.0, 6.51, 6.47**

 **21,Roosevelt University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 5 0, -1.0, 7.5, 6.50, 6.50**

 **\* ,University of Minnesota,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 0 2 0, -1.0, 7.4, 6.42**

 **23,University of Utah,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 4 0, -0.1, 6.5, 6.40, 6.36**

 **24,Concordia University-Ann Arbor,\_\_\_\_\_\_\_\_\_\_\_ 2 9 0, -0.6, 7.0, 6.36, 6.46**

 **25,Davenport University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 5 0, -0.7, 7.0, 6.35, 6.45**

 **26,Colorado State University,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 3 5 0, -0.3, 6.4, 6.14, 5.95**

 **27,University of Denver,\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ 1 4 0, -0.6, 6.1, 5.51, 5.51**

 **28,United States Air Force Academy,\_\_\_\_\_\_\_\_\_\_ 0 6 0, -1.0, 6.5, 5.47, 5.46**

 **- \* 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=1641008407853000&usg=AOvVaw0tARnLTKZ3_Pod1yVfr6u0)**, 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=1641008407853000&usg=AOvVaw35hW_M1NkWgyV8ddhBPJRR)**.**

 **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.**