



Ratings are based on:

- Game results (who won, who lost)
- Non-conference results (see below)

That's all. The calculation uses the [Sonas formula](#) (which itself is based on the Elo formula for ranking chess players). The DKC Rankings is the only known ranking system to use the Sonas formula. Elements of the [Billingsley](#), [Wrathell](#), [Sagarin](#), and [Howell](#) ranking systems are also utilized in this system.

A strength of schedule component is calculated starting in week 2.

Bonuses and penalties are awarded for being undefeated at the end of the regular season or not playing the minimum number of required games.

In terms of non-region games vs. non-conference opponents (for example, a Div. 2 team vs. a Div. 1 team), wins over such opponents are not counted toward calculations of **conference** strength. Bonuses are awarded to the team, though, for beating upper division teams (Div. 1 vs Div. 2) but not for beating lower division teams (Div. 2 vs Div. 1). Losses to upper division teams are not penalized as much as losses to lower division teams. Regardless of win or loss vs. a non-region opponent however, the game will be reflected in the win/loss columns.

A team not a member of the CAA is assigned a rating of **189**. Juniors or JV teams (CAA: "Class C" teams) are assigned a rating of **165**. This does imply that regular varsity teams that play JV/Juniors teams as part of their regular season schedule (i.e. not a scrimmage) will be penalized for the game.

All components are added together, and ranks assigned.

Adjustments are then made by comparing teams - more losses by a team means less of a rating increase per win. A calculated head-to-head adjustment is also added should two teams be ranked "closely" and the loser is ranked higher than the winner, but by no means does this ensure that the winner will end up ranked higher than the loser - it simply gives credit to the winner for playing, and beating, a higher ranked team.

Another way to explain it is thus: say Team A is ranked #2 and loses to Team B ranked #20. After the initial calculations are completed, Team A drops to #10 and Team B rises to #14. Just because Team B beats Team A does not give Team B the ability to jump to #9; conversely, it would not be prudent to drop Team A to #15 either based on that one game. This adjustment is checked for in the week the game is played and the following week **only**. The reason is because the ratings move around due to games played in the weeks that follow and the adjustment will have already been accounted for.

After these final adjustments, teams are re-ranked, and the final output is available.

Ratings are usually updated after all weekend scores have been reported.

FREQUENTLY ASKED QUESTIONS

What are these rankings?

These rankings are computer rankings, plain and simple. They measure how well a team has played UP TO THIS POINT. They are not a predictor of future games, nor are they a measure of whether one team IS better than another, they are simply measuring what teams have PLAYED better up 'til now. The rankings use a formula similar to those computer rankings used by the BCS to measure NCAA Division I teams (like Arizona, USC, Texas, etc.).

What info do you use to create the rankings?

Wins and losses. Pretty simple. Conference strength is an implicit part of the formula, but is not directly called upon. Wins are worth more later in the season than earlier in the season as teams are supposed to be "hitting their stride" by the end of the season and not "trying to figure things out" like the beginning of a season.

What does RANK and RATING mean?

- **Rank** is the ordinal number assigned to each team after all ratings are compared and sorted in numerical order.
 - The rankings (collection of ranks) are based on wins and losses, strength of schedule (calculated by taking a weighted average of previous opponents' ratings), strength of conference, bonus points for wins over non-divisional opponents in the high school divisions (lower division team beating an upper division team, for example), and adjustments for head-to-head games.
- **Rating** is the "point total" after calculations are completed for the games in the previous week. (A week, for calculation purposes, begins on Monday and ends on Sunday).

Does strength of schedule factor in somehow?

Yes, strength of schedule is a definite factor in the rankings. Strength of schedule, however, is not determined by the old NCAA formula from the late 90's/early 2000's (2/3 of opponent's schedule, 1/3 opponent's schedule). Instead, the SOS is calculated by taking the weighted average of the opponents' ratings. This allows the system to account for tougher opponents and gives those games more weight vs. weak opponents. The NCAA dropped the old SOS formula on purpose, so there's no reason why it should still be used anywhere else.

What happens when a team doesn't have a game one week?

Calculations are in place for idle teams. This may or may not keep a team's ranking the same or reasonably close to it as the previous week, but it accounts for changes in their SOS that would otherwise be missed.

Team B was highly ranked when team A beat them. Does the rating team A received change during the course of the season?

The ratings do not change as the season progresses because it's not fair to the teams. Let's say Team B is ranked #1 after week 5 because it's undefeated and has a schedule strength of 10 (out of 34 teams in the division). [Note: The SOS is only used as a reference point to show that Team B was not playing a weak schedule.] In other words, Team B deserves a #1 ranking.

In week 6, Team A beats Team B. Team A gets the credit for beating a highly-ranked team. However, Team B goes on a 3-game losing streak afterwards.

Is it fair to Team A to drop their rating because Team B now is a mediocre team? No, of course not. They beat a highly ranked and good team at the time, therefore they deserve the rating for beating such a team. One could suggest that Team A exposed Team B's weaknesses in beating Team B - not to mention Team A was the first team to beat Team B that season!

Lastly, changing point values as the season progresses ends up penalizing teams that might have a big non-conference win or two early on in their season but play in a weak conference.

How come my team dropped in the rankings even though they won (or didn't play)? That shouldn't happen, should it?

Yes, teams can drop even if they win - I have not seen a poll yet (AP, Coaches, computer, etc.) where this does not happen. One of the reasons why this happens is because another team has **RISEN** in the rankings to replace a team, and thus teams are bumped down.

How are forfeit games factored into the rankings?

Forfeited games will be recalculated as losses (or wins, if you happen to be the opponent), so a team's rank WILL change. Forfeited games are entered into the CAA Website as 1-0, 2-0, 3-0, or 6-0 scores depending on the sport. (soccer, football should record as 1-0, basketball should record as 2-0, volleyball should be 3-0, and baseball/softball should be 6-0). The system takes those games as "normal" games and counts them as it would if the game had been played and the final score was actually that.

How come my team is ranked below other teams even though I have more wins?

This system does not give a set number of points per win (aka "power points"). Due to unbalanced schedules, if such a system were in place, you can immediately see that teams that played more games would receive an advantage. Instead, a team increases its rating when it beats another team, but the amount of increase is based on the losing team's rating prior to the game. So, if you beat a bad team with a low rating, you will not increase as much as if you beat a better team. Thus, if all the teams you beat are bad teams, you would be undefeated, but your Strength of Schedule will come back to hurt you, and your point totals will not be as high as they could be if you had beaten better teams.

My team has a better win percentage but why are we ranked lower?

Win percentage - coaches love this, because they believe this is a great benchmark. It is, to a point. However, win percentage is a misnomer - a team can play more games and have a lesser win percentage than a team that plays fewer games.

Example: Team A goes 10-5, Team B goes 9-4. On the surface, Team A looks like it's the better team (10 wins!). However, via Win Percentage, Team A is .667 and Team B is .692!

The ranking formula cannot be "jury-rigged" to cater to a Win Percentage formula because it actually doesn't consider the quantity of games played.

Are there any provisions/bonuses/calculations used?

Yes, there is a small bonus for completing the season undefeated.

However, there are no provisions/bonuses/calculations for the following:

1. Home field
2. Injuries
3. Margin of victory
4. Win percentage
5. Remaining undefeated while there are games yet to be played

Are there "Good" and "Bad" losses?

When a team plays a team lower than themselves in the rankings, even if the team wins, their rating increases but at a slower rate because they SHOULD have won anyway (the mathematical formula expects them to win). So, even though a team plays a "weaker" schedule, for every win over a team that was below them in the rankings, their own rating doesn't increase by all that much as if they had beaten teams higher in the rankings. Losses to teams that are higher ranked do not hurt as much as losses to teams that are lower ranked - those types of losses really hurt.

(Hence "Good" losses versus "Bad" losses.)

How many points does a team start with? What if they don't their 1st game for a couple of weeks?

Recall that every team starts the season at 200.000. If a team has no games after a period of time, the team only manages to gain points for being idle but also is penalized for having the weakest SOS.

For example, a division with 32 teams, the midpoint would be the team ranked #16. A team with no games, should be below the mid-point as they haven't lost any games, so they can't go below the original 200.000 points (no points to lose).

The confusion stems from the fact that people assume that every team starts with zero points and go up from there. If that were actually true, then teams with zero wins and only losses would have negative points!

What happens if a team has to forfeit previous played "victories"?

The League notifies our rankings vendor, victories are changed to forfeit losses and the rankings are re-run.