
U.S. TRACK & FIELD AND CROSS COUNTRY
COACHES ASSOCIATION



2010
NCAA Division III
Track & Field Team Rankings
Rationale and Guidelines

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Introduction

For the first time, Division III national team rankings will be compiled in a similar fashion as which is now used in Division I. Mathematical formulae based on current national descending order lists will be used to compile a team's ranking. The purpose and methodology of the rankings is to create an index that showcases the teams that have the best potential of achieving the top spots in the national-title race.

The rankings should not be confused as a “form chart” or a hard-line predictor of NCAA Championship team finishes, but as an indicator of those who have the best chances and deepest rosters to compete as the nation's best.

Individuals and relay teams aren't “ranked” by the USTFCCCA, but they hold spots on the national descending order list. A person's spot on the national-descending order list will match their scored position within the team rankings for all weeks in Division III.

In addition, the USTFCCCA National Team Rankings should not be referred to as a “poll” as no voting occurs during the process.

Rankings will be released on Wednesdays of each week.



2010 USTFCCA Track & Field Team Rankings — Division III

Rankings Calendar

KEY

C – only current season data is used in rankings

D – postseason declarations for NCAA Championships will be used to compile rankings

NCAA – final results from the NCAA Championships will be considered as the final ranking

INDOOR

January 20	Week 1 rankings (C)
January 27	Week 2 rankings (C)
February 3	Week 3 rankings (C)
February 10	Week 4 rankings (C)
February 17	Week 5 rankings (C)
February 24	Week 5 rankings (C)
March 3	Week 6 rankings (C)
March 9	Week 7 rankings (D) [rankings will be released Tuesday prior to championships]
March 12-13	NCAA Division III Indoor Championships, Greencastle, Ind., DePauw University
March 15	Final rankings (NCAA)

OUTDOOR

March 31	Week 1 rankings (C)
April 7	Week 2 rankings (C)
April 14	Week 3 rankings (C)
April 21	Week 4 rankings (C)
April 28	Week 5 rankings (C)
May 5	Week 6 rankings (C)
May 12	Week 7 rankings (C)
May 19	Week 8 rankings (C)
May 24	Week 9 rankings (D) [rankings will be released Monday prior to championships]
May 27-29	NCAA Division III Championships
May 31	Final rankings (NCAA)



Scoring Detail

Team Ranking Score

The scoring system for the teams shall be the sum of two factors measured per individual/relay performance on the descending-order lists: **place** on the descending order list and a **weighed value of the individual/relay performance** based on the field (“bonus”).

Team Ranking Score =

$$\Sigma (\text{Athlete's Place Points} + \text{Athlete's Separation Bonus})$$

Step 1: Place Points

Basics

Specific place points are assigned to spots one through 30, indoor, and one through 35, outdoor. The No. 1-ranked performance is given 20 place points.

Points cascade downward, at a regressive exponential rate with one (1) point representing those who are located at the average cut-off position of national qualification (i.e. 15th place indoor, 18th place outdoor).

Points continue downward with small fractions of a point given to those in the latter places, representing those who have diminishing chances of making the national meet.

Therefore, teams can benefit when having multiple individuals who have performances that stand just outside the normal eighth-place scoring spot. With the rationale being that those who stand within a certain range from the normal-scoring position on the descending-order lists have a possibility of scoring in the NCAA meet.

Unlike normal meet scoring, place points are not divided equally amongst those tied. Instead, each place that is tied will get the full value for that position, i.e., if three athletes are tied for sixth, all three would receive 10 points, instead of sharing points for sixth, seventh, and eighth (10-9-8).

Rationale

Scoring in an NCAA Championship meet is difficult, since only the top eight spots garner points for their teams.

In that light, it was important to weigh those athletes that had the best potential of reaching the top eight with a wider margin of confidence than those in places 9-20. However, since those who actually make the meet have a decent shot of scoring, they must be considered when picking the best method of including all parts of the team.

In addition, in early rankings the reflection of those athletes in the 16-30 spots (indoor) and 19-35 spots (outdoor) reflect the team’s overall potential of placing athletes in the meet, and those athletes scoring in the meet. While these athletes have the potential to score national points, the awarded points in this system are only a small proportion compared to those who are in the upper tier.

Instead of scoring the performance list in the simple 10-8-6-5-4-3-2-1 method, I recommend expanding the scoring field for the purpose of predicting the best potential for those athletes to eventually jump into the top eight.

2010 Indoor Place-Points Scoring Chart

1st _____ 20	13th _____ 2	25th _____ 0.25
2nd _____ 18	14th _____ 1.5	26th _____ 0.2
3rd _____ 16	15th _____ 1	27th _____ 0.15
4th _____ 14	16th _____ 0.9	28th _____ 0.1
5th _____ 12	17th _____ 0.8	29th _____ 0.05
6th _____ 10	18th _____ 0.7	30th _____ 0.02
7th _____ 8	19th _____ 0.6	
8th _____ 7	20th _____ 0.5	
9th _____ 6	21st _____ 0.45	
10th _____ 5	22nd _____ 0.4	
11th _____ 4	23rd _____ 0.35	
12th _____ 3	24th _____ 0.3	

2010 Outdoor Place-Points Scoring Chart

1st _____ 20	15th _____ 2.5	29th _____ 0.25
2nd _____ 18	16th _____ 2	30th _____ 0.2
3rd _____ 16	17th _____ 1.5	31st _____ 0.16
4th _____ 14	18th _____ 1	32nd _____ 0.12
5th _____ 12	19th _____ 0.9	33rd _____ 0.08
6th _____ 10	20th _____ 0.8	34th _____ 0.04
7th _____ 9	21st _____ 0.7	35th _____ 0.02
8th _____ 8	22nd _____ 0.6	
9th _____ 7	23rd _____ 0.55	
10th _____ 6	24th _____ 0.5	
11th _____ 5	25th _____ 0.45	
12th _____ 4	26th _____ 0.4	
13th _____ 3.5	27th _____ 0.35	
14th _____ 3	28th _____ 0.3	



Scoring Detail

Step 2: “Bonus” Points

Basics

The system’s “bonus” points benefits the individuals whose performances are within a small margin of those within the top spots of the field, or abundantly better than the rest of the field. The highest “bonus” point totals will always be assigned to those ranked highest on the descending order list.

The bonus pool, per event, consists of 20 points per event. The pool’s allotment is spread to each individual performance based on the mark in comparison to the rest of the field that is based on three variances.

A person’s mark is compared to three spots on each descending-order lists to compose the three indexes that will determine one’s “bonus” total. Should a mark better or come within one-percent of those marks at 15th (indoor) or 18th (outdoor) place on the list, then the mark will be have an opportunity for at least some bonus consideration.

An individual’s “bonus” index is the **sum of three parts**: comparisons with third place (“Show” index), comparisons with eighth place (“Score” index), and comparisons with 15th/18th place (“Make” index). The mark is compared to each of those three parts, and should the mark better or come within one percent, of any or all of those parts, then an index will be calculated for each part affected.

Example

For example, let’s take the indoor women’s 200-meter dash. Sue’s mark at sixth place on the descending order list is a time of 22.99 seconds. We will compare Sue’s mark versus what is currently third place, which is 22.92, currently eighth place, which is 23.24, and currently 17th-place, which is 23.52.

- Sue’s mark is 99.6955% (within one-percent) of the 22.92 in third place, therefore she garners a “Show” index of **0.6955**.
- Sue’s mark is 101.0874% as good as the mark at eighth place (23.24), therefore, Sue’s “Score” index is **2.0874**.
- Sue’s mark is 102.3054% of the 15th-place mark for a “Make” index of **3.3054**.
- Sue’s sum of all indexes is **6.0883**.
- The sum of all indexes amongst the field in the event is **66.3747**.
- Since 6.0883 is 9.173% of 66.3747, Sue will be awarded 9.173% of 20 points, which is **1.834**.
- Sue would receive 10 place points (based on the table on the following pages) for sixth-place. Adding, her 1.834 bonus, Sue will receive a total of **11.834** towards her team’s ranking.

In this example, only six people received a “Show” index, as only six people were better or within one-percent (0.23 seconds) of third place’s 22.92. Fifteen performances were better or within one-percent of eighth place’s 23.24 and received a “Score” index. There were 22 performances worthy of a “Make” index, better or within one-percent of 17th place’s 23.52.

Also in this example, first place, earned 2.39 bonus points as the athlete accumulated 11.97% of the field’s indexes.

Full Formula

Separation Bonus =

$$\frac{\text{Individual's Bonus Index}}{\sum \text{All Indexes Among Same Event}} \times 20$$

Individual’s Bonus Index =

“Show Index” + “Score” Index + “Make” Index

“Show” Index =

$$\left(\frac{\text{Athlete's Performance}}{\text{Third-place Performance}} \right) - 0.99$$

NOTE: These formulas inside the parentheses are flipped for field events.

“Score” Index =

$$\left(\frac{\text{Athlete's Performance}}{\text{Eighth-place Performance}} \right) - 0.99$$

“Make Index” =

$$\left(\frac{\text{Athlete's Performance}}{\text{"Making"-place Performance}} \right) - 0.99$$

Making-place =

15th for the indoor season, 18th for the outdoor season

Rationale

Basically, those who are within one-percent (0.99) of the performance set by the “show-person”, the person with the third-best performance in the field, the “score-person”, the person with the eighth-best performance in the field, and the “make-person”, the person with the 15th- or 18th-best performance in the field (representing those who have the best chance to make the meet), will get some portion of the bonus.

Those who have performances better than those in third, eighth, and (15th or 18th) will get the most points.



2010 USTFCCA Track & Field Team Rankings — NCAA Division III

Method at Work

Scoring System at Work

In this example, we take the men's pole vault performance list prior to the NCAA Indoor competition, March 5, 2007.

Rk	Athlete	School	Mark	Place	Advantage			Index			Indiv. Total Index	Event Total Index	Index Pct.	Bonus Points	Total Virtual Points
					"Show"	"Score"	"Make"	"Show"	"Score"	"Make"					
1	Brad Gebauer	McNeese St.	5.60	20	1.0163	1.0370	1.0507	0.0263	0.0470	0.0607	0.1340	0.7339	18.26%	3.6526	23.6526
2	Scott Roth	Washington	5.53	18	1.0036	1.0241	1.0375	0.0136	0.0341	0.0475	0.0952	0.7339	12.98%	2.5952	20.5952
3	Thomas Skipper	Oregon	5.51	16	1.0000	1.0204	1.0338	0.0100	0.0304	0.0438	0.0841	0.7339	11.47%	2.2931	18.2931
4	Chip Heuser	Oklahoma	5.50	14	0.9982	1.0185	1.0319	0.0082	0.0285	0.0419	0.0786	0.7339	10.71%	2.1420	16.1420
5	McKane Lee	Washington	5.43	12	0.9855	1.0056	1.0188	0.0000	0.0156	0.0288	0.0443	0.7339	6.04%	1.2078	13.2078
6	Thorsten Mueller	Virginia Tech	5.42	10	0.9837	1.0037	1.0169	0.0000	0.0137	0.0269	0.0406	0.7339	5.53%	1.1062	11.1062
7	Graeme Hoste	Stanford	5.41	9	0.9819	1.0019	1.0150	0.0000	0.0119	0.0250	0.0369	0.7339	5.02%	1.0046	10.0046
8	Rory Quiller	Binghamton	5.40	8	0.9800	1.0000	1.0131	0.0000	0.0100	0.0231	0.0331	0.7339	4.51%	0.9030	8.9030
8	Andre Poljanec	UNI	5.40	8	0.9800	1.0000	1.0131	0.0000	0.0100	0.0231	0.0331	0.7339	4.51%	0.9030	8.9030
8	Mitch Greeley	Clemson	5.40	8	0.9800	1.0000	1.0131	0.0000	0.0100	0.0231	0.0331	0.7339	4.51%	0.9030	8.9030
11	Whitney Neves	BYU	5.38	5	0.9764	0.9963	1.0094	0.0000	0.0063	0.0194	0.0257	0.7339	3.50%	0.6998	5.6998
11	Mark Johnson	Auburn	5.38	5	0.9764	0.9963	1.0094	0.0000	0.0063	0.0194	0.0257	0.7339	3.50%	0.6998	5.6998
13	Matt Weirich	BYU	5.33	3	0.9673	0.9870	1.0000	0.0000	0.0000	0.0100	0.0100	0.7339	1.36%	0.2725	3.2725
13	Michael Hogue	Tennessee	5.33	3	0.9673	0.9870	1.0000	0.0000	0.0000	0.0100	0.0100	0.7339	1.36%	0.2725	3.2725
13	Jarno Kivioja	UNI	5.33	3	0.9673	0.9870	1.0000	0.0000	0.0000	0.0100	0.0100	0.7339	1.36%	0.2725	3.2725
13	Tyson Byers	WashingtonSt.	5.33	3	0.9673	0.9870	1.0000	0.0000	0.0000	0.0100	0.0100	0.7339	1.36%	0.2725	3.2725
17	Jordan Scott	Kansas	5.32	1	0.9655	0.9852	0.9981	0.0000	0.0000	0.0081	0.0081	0.7339	1.11%	0.2214	1.2214
17	Mike Landers	UCLA	5.32	1	0.9655	0.9852	0.9981	0.0000	0.0000	0.0081	0.0081	0.7339	1.11%	0.2214	1.2214
19	Scott Martin	Oklahoma	5.3	0.8	0.9619	0.9815	0.9944	0.0000	0.0000	0.0044	0.0044	0.7339	0.60%	0.1191	0.9191
19	Seth Burney	Nebraska	5.3	0.8	0.9619	0.9815	0.9944	0.0000	0.0000	0.0044	0.0044	0.7339	0.60%	0.1191	0.9191
19	Gable Baldwin	Nebraska	5.3	0.8	0.9619	0.9815	0.9944	0.0000	0.0000	0.0044	0.0044	0.7339	0.60%	0.1191	0.9191
22	Nick Mossberg	Arizona	5.27	0.5	0.9564	0.9759	0.9887	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.5000
22	Bob Low	BYU	5.27	0.5	0.9564	0.9759	0.9887	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.5000
24	Adam Sarafian	Arkansas St.	5.26	0.3	0.9546	0.9741	0.9869	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.3000
25	Matt Adkisson	Sam Houston St.	5.24	0.2	0.9510	0.9704	0.9831	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.2000
26	Jeremy Brading	Kent State	5.22	0.15	0.9474	0.9667	0.9794	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.1500
26	Andy Lane	Tennessee	5.22	0.15	0.9474	0.9667	0.9794	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.1500
28	Kyle Ellis	E. Illinois	5.21	0.1	0.9456	0.9648	0.9775	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.1000
28	Mark Langlois	Michigan St.	5.21	0.1	0.9456	0.9648	0.9775	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.1000
28	Andrew Park	Princeton	5.21	0.1	0.9456	0.9648	0.9775	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.1000
31	David Murphy	UCLA	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Elliott Haynie	Gardner-Webb	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Joshua Ghaly	Robert Morris	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Chris Ashcraft	Texas Tech	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Mike S. Morrison	Florida	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Jeff Coover	Indiana	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Dan McKenzie	S. Carolina	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Bryce Bergman	Kansas State	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Jordan Thull	Northeastern	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Joe Samaniuk	Virginia Tech	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Matthew Hurley	Fla St.	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400
31	Dan Imlach	Sac State	5.2	0.04	0.9437	0.9630	0.9756	0.0000	0.0000	0.0000	0.0000	0.7339	0.00%	0.0000	0.0400



2010 USTFCCA Track & Field Team Rankings — NCAA Division III

Accuracy Data

A Week Out...

These charts show the accuracy of the rankings when compared with final national finish for the week entering the NCAA Championships. (Division I data)

All Seasons (8 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	71%	75%	92%	100%	100%	100%	100%
Top 5		68%	85%	93%	98%	98%	98%
Top 8			73%	84%	95%	97%	97%
Top 10				80%	89%	95%	95%
Top 15					81%	94%	94%
Top 20						80%	85%
Top 25							79%

2009 Indoor & Outdoor Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	75%	75%	100%	100%	100%	100%	100%
Top 5		65%	85%	100%	100%	100%	100%
Top 8			72%	91%	100%	100%	100%
Top 10				85%	93%	100%	100%
Top 15					80%	97%	97%
Top 20						83%	88%
Top 25							82%

Indoor Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	58%	75%	100%	100%	100%	100%	100%
Top 5		65%	95%	100%	100%	100%	100%
Top 8			77%	90%	97%	100%	100%
Top 10				85%	90%	97%	97%
Top 15					81%	93%	93%
Top 20						78%	81%
Top 25							73%

Men's Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	92%	100%	100%	100%	100%	100%
Top 5		75%	85%	90%	100%	100%	100%
Top 8			78%	88%	94%	97%	97%
Top 10				80%	85%	98%	98%
Top 15					82%	97%	97%
Top 20						83%	85%
Top 25							80%

Outdoor Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	83%	92%	100%	100%	100%	100%	100%
Top 5		70%	75%	85%	95%	95%	95%
Top 8			69%	78%	94%	94%	94%
Top 10				75%	88%	93%	93%
Top 15					82%	95%	95%
Top 20						83%	89%
Top 25							85%

Women's Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	75%	75%	100%	100%	100%	100%	100%
Top 5		60%	85%	95%	95%	95%	95%
Top 8			68%	81%	97%	97%	97%
Top 10				79%	92%	92%	92%
Top 15					81%	91%	91%
Top 20						78%	85%
Top 25							79%



2010 USTFCCA Track & Field Team Rankings — NCAA Division III

Accuracy Data

At Midseason ...

These charts show the accuracy of the rankings at midseason when compared to finish at the NCAA Championships.
(Division I data)

All Seasons (8 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	83%	92%	96%	100%	100%	100%
Top 5		63%	80%	88%	95%	95%	95%
Top 8			70%	78%	86%	92%	92%
Top 10				73%	84%	92%	92%
Top 15					79%	89%	90%
Top 20						77%	82%
Top 25							76%

2009 Indoor & Outdoor Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	75%	92%	100%	100%	100%	100%
Top 5		55%	80%	95%	100%	100%	100%
Top 8			69%	84%	88%	97%	97%
Top 10				78%	85%	98%	98%
Top 15					78%	92%	92%
Top 20						79%	81%
Top 25							76%

Indoor Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	83%	92%	100%	100%	100%	100%
Top 5		65%	80%	90%	95%	95%	95%
Top 8			74%	84%	90%	94%	94%
Top 10				74%	82%	92%	92%
Top 15					80%	86%	86%
Top 20						74%	77%
Top 25							72%

Men's Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	83%	92%	92%	100%	100%	100%
Top 5		65%	80%	90%	95%	95%	95%
Top 8			66%	75%	84%	94%	94%
Top 10				73%	83%	95%	95%
Top 15					78%	90%	90%
Top 20						76%	80%
Top 25							76%

Outdoor Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	83%	92%	92%	100%	100%	100%
Top 5		60%	80%	85%	95%	95%	95%
Top 8			66%	72%	81%	91%	91%
Top 10				73%	85%	93%	93%
Top 15					78%	92%	93%
Top 20						80%	86%
Top 25							80%

Women's Seasons (4 trials)							
Final Predicted	Top 3	Top 5	Top 8	Top 10	Top 15	Top 20	Top 25
Top 3	67%	83%	92%	100%	100%	100%	100%
Top 5		60%	80%	85%	95%	95%	95%
Top 8			74%	81%	87%	90%	90%
Top 10				74%	85%	90%	90%
Top 15					80%	88%	90%
Top 20						78%	83%
Top 25							77%