

Handicapped for Success: How is My Handicap Index Calculated?

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It's time to dive into the math behind a **Handicap Index**! Wait, don't stop reading yet! I can imagine your glazed expression, but stick with me here. Knowing the **Index** formula will really help with your understanding of how a handicap works.

Our last article covered some common handicapping terms including **Course Rating** and **Slope Rating**. Now we will add another term to the mix: **Handicap Differential**. If you've ever looked closely at your scoring record, you will notice an extra number, similar to an **Index**, next to your scores. This number is the **Handicap Differential**. Each score you post is "translated" to reflect the relative difficulty of the course you played. As you look at the scoring record below, you may ask yourself, "Why are the highlighted scores used?" Simple answer, the lowest differentials are used to determine or calculate your handicap index, but we will cover that later in the article.

Highlighted scores below were used in calculating the Index.							
	Date	Course	Score	CR	Slope	Diff	Type
1	5/29/2012	University of Maryland Golf Club	92	69.6	118	21.5	CI
2	5/17/2012	Falls Road Golf Course	94	66.5	109	28.5	CI
3	5/1/2012	University of Maryland Golf Club	96	69.6	118	25.3	CI
4	8/26/2011	Eisenhower Golf Club	94	66.4	117	26.7	AI
5	8/21/2011	Sligo Creek Golf Club	86	67.5	112	18.7	CI
6	8/19/2011	East Potomac Golf Course (Blue)	100	71.2	114	28.5	AI
7	8/10/2011	Paint Branch Golf Club	84	57.4	80	37.6	AI
8	8/9/2011	Paint Branch Golf Club	73	57.4	80	22.0	AI
9	8/8/2011	Paint Branch Golf Club	77	57.4	80	27.7	AI
10	8/5/2011	Sligo Creek Golf Club	100	67.5	112	32.8	CI
11	8/2/2011	University of Maryland Golf Club	100	70.9	121	27.2	AI
12	8/1/2011	Paint Branch Golf Club	89	63.2	98	29.7	CI
13	7/27/2011	Glenn Dale Golf Club	100	73.3	123	24.5	AI
14	7/23/2011	Sligo Creek Golf Club	85	61.4	94	28.4	CI
15	7/19/2011	University of Maryland Golf Club	98	70.2	118	26.6	CI
16	7/13/2011	Paint Branch Golf Club	82	58	82	33.1	AI
17	7/6/2011	Paint Branch Golf Club	93	64.1	100	32.7	CI
18	7/6/2011	Paint Branch Golf Club	83	58	82	34.5	AI
19	6/29/2011	Paint Branch Golf Club	81	58	82	31.7	AI
20	6/28/2011	Northwest Golf Course	87	60.6	96	31.1	CI

Score Types: A=Away, C=Combined Nines, I=Internet, P=Penalty, T=Tournament

The **Handicap Differential** formula is: **(Adjusted Gross Score* – Course Rating) x 113 / Slope Rating**

*Oh no, another new term. Don't worry, we will cover this in depth in future article. But for right now, in simple terms the Slope Rating indicates the courses relative degree of difficulty as compared to all other golf courses. A golf course of standard playing difficulty has a Slope Rating of 113. Slope Ratings range from 55 to 155.

Here's a comparison of three hypothetical rounds played on courses with the same **Course Rating** but different **Slope Ratings**. Notice the difference in the **Handicap Differentials**. This is due to the difference in the **Slope Ratings** of the three courses.

EASIER COURSE	Buena Vista Golf Course, CA	HARDER COURSE
West Hill GC, NY	Handicap Differential Formula	Winber Country Club, PA
98 - 71.8 = 26.2	1. Adjusted Gross Score - Course Rating 98 - 71.8 = 26.2	98 - 71.8 = 26.2
26.2 x 113 = 2960.60	2. Difference x Standard Slope Rating (113) 26.2 x 113 = 2960.60	26.2 x 113 = 2960.60
2960.60 / 118 = 25.09	3. Result / Slope Rating 2960.60 / 120 = 24.67	2960.60 / 136 = 21.76
25.1	4. Handicap Differential (rounded) 24.7	21.8

Now that we have an understanding of a **Handicap Differential**, let's move on to calculating your **Handicap Index**. For this we will assume that you've posted twenty 18-hole scores to your record, each with its own **Handicap Differential**. The **Handicap Index** formula uses the average of your 10 lowest Handicap Differentials to compute your **Index**.

The formula is: Sum of 10 lowest **Differentials** / 10 x .96*, drop all digits after the tenths, no rounding

Using the scoring record example above, here's how the **Handicap Index** would be calculated:

HANDICAP INDEX CALCULATION						
You have 20 scores available. Each score produces a differential that is calculated as follows: (Score - Rating) x 113 / Slope. Based on your available scores, the lowest 10 score differentials are used in calculating your official USGA Handicap Index.						
Date	Course	Score	Rating	Slope	Diff	Type
1	5/29/2012 University of Maryland Golf Club	92	69.6	118	21.5	CI
2	5/1/2012 University of Maryland Golf Club	96	69.6	118	25.3	CI
3	8/26/2011 Eisenhower Golf Club	94	66.4	117	26.7	AI
4	8/21/2011 Sligo Creek Golf Club	86	67.5	112	18.7	CI
5	8/9/2011 Paint Branch Golf Club	73	57.4	80	22.0	AI
6	8/8/2011 Paint Branch Golf Club	77	57.4	80	27.7	AI
7	8/2/2011 University of Maryland Golf Club	100	70.9	121	27.2	AI
8	7/27/2011 Glenn Dale Golf Club	100	73.3	123	24.5	AI
9	7/23/2011 Sligo Creek Golf Club	85	61.4	94	28.4	CI
10	7/19/2011 University of Maryland Golf Club	98	70.2	118	26.6	CI
Sum of all differentials: 248.5						
Average based on 10 differentials: 24.85						
Average multiplied by .96: 23.853						
Delete all digits after tenths: 23.8						
Official USGA Handicap Index 23.8						

In order to reflect your current potential ability, the **Handicap Index** formula always uses the 10 lowest **Differentials** of your *20 most recent scores*. This is why your **Index** changes over time, depending on where you play and how you score. But what if you have less than 20 scores in your scoring record? The following chart is used to determine how many scores are used in your calculation:

NUMBER OF ACCEPTABLE SCORES	DIFFERENTIAL(S) TO BE USED
5 or 6	Lowest 1
7 or 8	Lowest 2
9 or 10	Lowest 3
11 or 12	Lowest 4
13 or 14	Lowest 5
15 or 16	Lowest 6
17	Lowest 7
18	Lowest 8
19	Lowest 9
20	Lowest 10

So now that you know the details, here are the basic concepts you should remember.

- 1) A **Handicap Differential** is a number generated from a formula which takes into consideration course difficulty. Remember the lowest 10 **Handicap Differentials** are used to calculate your **Handicap Index**.
- 2) A **Handicap Index** can be used at any golf course and is converted to a specific **Course Handicap** to ensure a level playing field of all competitors.
- 3) There is really no need to memorize the formulas. Just ensure that you post your scores with **accurate Course Ratings & Slope Ratings**.

Now you are an expert on **Handicap Index** calculations! Stay tuned for our next article in the Handicapped for Success series where we will tackle **Course Handicaps and Adjusted Gross Scores!**