

2025 Edition

GAM COURSE RATING GUIDE

For Club Administrators



Dear Club Administrators,

The Golf Association of Michigan (GAM) hopes that you are well and ecstatic about everything that golf in Michigan has to offer in another great season. This guide presents an opportunity to learn more about GAM's course rating team and services.

Whether a club administrator, handicap committee chair, or one of our 90,000-plus members, we believe that this resource will make you more informed about the GAM's course rating process and the implications of course rating on your participation in the World Handicap System®.

The Course Rating System™ is directly guided by the World Handicap System (WHS), under the joint direction of the United States Golf Association® (USGA®) and Royal and Ancient Golf Club® (R&A®), to establish the global application of the WHS. As an authorized association, GAM is given jurisdiction within Michigan by the USGA to exercise oversight and application of the World Handicap System. This duty as an authorized association includes the responsibility to conduct all course ratings within our jurisdiction.

GAM is proud to highlight our robust Course Rating Program, which is fueled annually by approximately 100 participating volunteers from across the state. In 2024, GAM completed 76 comprehensive course ratings and 146 days of in-person fieldwork. In addition to often more than ten days of on-course activity, our raters complete thorough training exercises administered by GAM in accordance with the WHS certification requirements. Staff, Captains, and Team Leaders also attend additional training opportunities offered by the USGA/WHS.

As we encounter the 2025 season, GAM's course rating teams are prepared and eager to continue to serve Michigan's golf community. We hope that the information contained in this guide provides a better understanding of course rating and its implications for our game.

Warmest Regards,
Hunter L. Koch
Director of Course Rating

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Contact GAM

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GAM's Course Rating Team

Always Ready

GAM's Course Ratings are conducted by a large, robust, and highly qualified team of staff, volunteer captains, and volunteer raters. In 2024, 96 raters participated in at least one rating; and, 40 of those raters participated in at least 10 days of rating activities accounting for over 76% of all days of participation.

The Course Rating Program is led by Hunter Koch, of Saginaw, as GAM's Director of Course Rating. This is his third year on staff and fifth season as a course rater. You can contact the GAM Course Rating Team through Hunter at hkoch@gam.org or by phone at (248)-478-9242, Ext. 118.

Continuing this year, the team will be joined by a USGA P.J. Boatwright Intern in Course Rating from May through August.

GAM's on-course fieldwork activities are guided by the leadership of several volunteer captains spread throughout the state, with a cumulative 133 years of rating experience (year starting rating in parenthesis):

- Mark Bultema, of Rockford (1998)
- Mike and Connie Brady, of Hudsonville (2008 & 2004)
- Laurie Puscas, of Rochester Hills (2011)
- John Aulepp, of Northville (2013)
- Mark Erickson, of Owosso (2016)
- Darrell Zavitz, of Charlevoix (2016)
- John Holden, of St. Joseph (2019)
- Erik and Carmany Thorp, of Mullett Lake (2019 & 2019)
- David Klingbiel, of Grand Ledge (2022)
- Martin Score, of Lake Orion (2022)

Being a Course Rater

GAM's Course Rating Program relies heavily on the commitment of our volunteers, as well as the robust series of training and safeguards put in place to ensure our course ratings are thoroughly and accurately conducted.

New raters with GAM are required to participate and succeed in extensive training opportunities. They are asked to complete online orientations, participate in winter training sessions, attend an on-course orientation, and train/shadow with an experienced rater for several ratings before becoming independently assigned.

Returning raters are also encouraged to continue to participate in weekly sessions throughout the winter and other periodical trainings during the season. They also are regularly updated on their accuracy through online quizzes and thorough review of their Form 1's.

Advanced raters, captains, and staff, also participate in regular training sessions provided by the USGA/WHS.

Celebrating Success

GAM annually presents three awards to course raters who go above and beyond to ensure the success of GAM's Course Rating Program. The 2024 winners were:

- Rater of the Year: Kurt Visniski
- Rookie of the Year: Brett Quencer
- Trainer of the Year: Don VanOostveen

What is a Course Rating?

And how is it established?

No two golf courses are the same. Course Rating® and Slope Rating® are the fundamental information necessary for the World Handicap System to compensate for that fact.

Authorized associations, like GAM, are given the jurisdiction to issue Course, Bogey, and Slope Ratings in accordance with the Course Rating System™. In the United States, the term "authorized association" is generally interchangeable with the term "Allied Golf Association" (AGA).

A Course Rating reflects the difficulty of a golf course for the scratch player (a player with a Handicap Index® of 0.0) under normal course and weather conditions. A Bogey Rating reflects the difficulty of a golf course for the bogey player (a player with a Handicap Index of 20.0 for men and 24.0 for women) under normal course and weather conditions. The Slope Rating is an indication of the relative difficulty of a golf course for players who are not scratch players compared to players who are scratch players, which is calculated via the relative difference between the Course and Bogey Rating.

The Course Rating and Slope Rating establish the difficulty of a course compared to other courses. They are used as the course data in establishing handicap differentials for score posting and the calculation of a playing handicap for formal or friendly competition.

Authorized associations, like GAM, assemble qualified teams to conduct course rating activities. These teams evaluate the golf course over two days – one for measurement, and the other for rating.

At the measurement, two important sets of data are collected. The first is the measurement of each hole from each set of tees to establish hole lengths. This is conducted by either the reflector or GPS method. In the reflector method, a series of reflectors are placed on each hole, taking into account pivot points on the intended line of play, and a high-accuracy electronic measurement device (EMD) is used to measure between reflectors. In the GPS (Global Positioning Satellite) method, a high-accuracy GPS unit is used to mark waypoints at the points used in the reflector method, and software is used to tabulate the distances between those points. Both methods are approved by the USGA for measuring the length golf courses.

The second set of data on measurement day corresponds to common features of the golf course from all tees. This information is important to calibrate all raters on rating day and includes measurements such as the distance to cross penalty areas, the coverage and depth of greenside bunkers, the distance to lateral penalty areas at the green, and the size and contouring of green surfaces. Captains and team leaders also confirm certain measurements and observations for accuracy with course staff.

On rating day, course raters complete a "Form 1" sheet to collect data on both effective playing length corrections and evaluate obstacle factors. Effective playing length corrections account for example abnormal roll, forced lay-ups, and the ability or inability to cut doglegs. Obstacle factors include topography, fairway, green target, recoverability and rough, bunkers, crossings, laterals, trees, green surface, and psychological. Each obstacle is given a rating between 0 and 10 from these charts and associated adjustments. The evaluated numerical values given to these factors are produced via data and observations collected and charts found in the Course Rating System Guide that raters are trained on and use while on course.

The Course and Bogey Ratings (both establishing the Slope Rating) are formulated through the sum of a calculated length rating and obstacle rating. The length rating, which makes up the vast majority of the formula is calculated via the effective playing length of the golf course, calculated as the measured length plus or minus the effective playing length corrections applied by rating teams. The obstacle rating is calculated via a weighting of each obstacle's cumulative values from each hole.

The Course Rating Process

Start to Finish

Pre-Fieldwork

The Course Rating Process is started by the Master Expiration List kept by GAM of the expiration date of each golf course in its jurisdiction (Michigan). Each year, the list produces 50-80 courses due for a re-rating on the year of expiration. An additional few clubs reach out to request an advanced rating and are added to the list.

Courses due for a re-rating are contacted by GAM Staff for scheduling purposes. Staff will schedule the club for two days of fieldwork, one for measuring and one for rating at a time which is mutually available for the club and GAM's course rating teams.

Once scheduled by staff, most course ratings are assigned to one or more volunteer captains who lead and oversee the days of fieldwork and data collection processes. Prior to the first day of fieldwork, the captain may contact you to confirm details and inquire about things such as changes made since the last rating, common course data, and maintenance practices.

Measurement Day (Length Verification)

The first day of on-course fieldwork will be the measurement day. GAM's standard measuring team consists of four raters, including the captain(s). For a standard 18-hole routing, the team will measure all holes sequentially as one-team starting at the designated time (generally around 8:30am). It is highly preferred that the club provide a 30-minute block to tee times behind this designated starting time to minimize impacts to your golfers. The measuring team moves around the golf course at or ahead of the pace of play and require three carts.

For measuring day, it is extremely important that the tee markers on each hole are placed on the teeing pad in which they are at for standard, normal play. For each tee, the measuring team will measure the overall hole lengths on this day from the midpoint of the pad (or its portion of the pad when more than one tee exists on a pad). If the markers are placed on pads not regularly used, a significantly longer or shorter measurement could be taken, skewing the final results. If a tee is healing or under construction at the time of the rating (and therefore cannot be used for play temporarily), please notify the captain of this for an accurate measurement to be taken.

The length measurement of the golf course is completed with precise techniques as it is the most impactful factor towards the final Course Ratings and Slope Ratings issued. Roughly, each 22 yards for men, and 18 yards for women, adds one-tenth of a point to the length rating.

On this day, the team will also take common measurements which apply to all players on the course and each specific hole such as green size, bunker depths, crossing lengths, and green surface slopes. Additionally, the team will measure green speed and rough heights. If your average midseason green speed or rough height is different than what is on the course on measuring day, please pass that information along to the captain. The team captain(s) will also briefly meet with a club administrator and/or the superintendent on site at each fieldwork visit.

GAM asks that the club provide the rating team lunch following the completion of fieldwork. Following lunch, it is customary that the club provide a tee time for the team to play the golf course. During this playthrough, the team takes note of any missed observations from the morning from the vantage point of a player. If lunch or play following is not possible, please let your assigned staff and/or captain contacts know well in advance.

Between Fieldwork

Between the two days of fieldwork, captains input data from the measuring day to build the Form 1's (standard forms used to collect data on rating days) and verify accuracy of the measurement data.

Rating Day (Course Rating)

The second day of on-course fieldwork will be the rating day. On rating day, each "team" of raters completes a formal evaluation of 9 holes of the golf course, starting on each nine at the designated starting time (generally about 8:30 am). On 18 and 27-hole routings, individual teams will simultaneously rate each nine. A team consists of one rater for each human-rated tee for each gender. Select tees that are extremely long or short will fall outside of the WHS-designated yardage ranges and will be rated via the duplication process, an important safeguard for data integrity and the design of the Course Rating System. Most 18-hole golf courses require 12-16 raters to complete all required evaluations.

Rating teams move approximately at the pace of play while on the course, completing nine holes in 90 to 150 minutes depending on complexity. Each rater requires their own golf cart to gather data throughout the assigned holes. Again, on rating day, it is highly preferred that the club provide a 30-minute block to tee times behind the designated starting time to minimize impacts to your golfers while on the course.

On rating days, individual members gather two important sets of data which are specific to their assigned tee and gender. The first is corrections to the effective playing length of a golf course, which can include adjustments for doglegs, lay-ups, or abnormal roll. The second is collecting the data for the assignment of obstacle values. There are ten obstacle factors evaluated, all of which require individual raters to collect several snapshots of data specific to their assignment. These data points are then entered into standardized tables and then combined with applied adjustments to create obstacle values. The effective playing length corrections and final obstacle ratings are the final data entered into the course rating database to calculate Course and Slope Ratings.

When raters return from the course, they spend several minutes calculating the individual obstacle ratings and completing their paperwork. They also perform checks over their sheets to validate accuracy, before handing them over to the captain for processing.

GAM asks that the club provide the rating team with lunch following the completion of fieldwork. Following lunch, it is customary that the club provide tee times for the team to play the golf course. The post-rating playthrough is an important part of the Course Rating System. The team takes note of any missed observations from the morning from the vantage point of a player and as needed makes modifications to their evaluations. If lunch or play following is not possible, please let your assigned staff and/or captain contacts know well in advance of the day of fieldwork so alternate arrangements can be made.

Processing and Publishing

Following the completion of the on-course fieldwork, the captain agglomerates the data from the individual rating sheets. They also provide thorough review for accuracy in data and calculations. After review, the final documents are forwarded to the GAM Staff for processing.

GAM staff again perform review of the data presented, and then enter it into the USGA's course rating data portal. Each yardage, effective playing length correction, and obstacle value from each rater's Form 1 are entered for the system to calculate Course and Slope Ratings for each tee and gender. At this point, staff run various reports to ensure there are no "red flags". After running these reports, the final Course and Slope Ratings are sent to the club for review. Unless a large data discrepancy is found, these sent ratings are issued for publishing.

The club has several options in regards to when to publish. If they want the ratings made active in the current season, they may ask for immediate publishing, or for the ratings to be published at a set date in the future. The most common and default option, however, is for the ratings to be published in the next offseason to avoid confusion in regard to score posting and printed scorecards. If GAM is not notified of a preference otherwise, new ratings will be scheduled to be activated prior to the next active season (generally in February or March).

Frequently Asked Questions

Better Understanding the System

When is a course rating necessary?

Golf courses change subtly and dramatically over the course of time. Trees grow taller and maintenance practices are continuously improved. Changes to the golf course's playability require course ratings to be conducted periodically throughout time.

The most common periodical re-rating of an existing golf course occurs every ten years. The Rules of Handicapping establish this interval as the point at which authorized association and AGAs like GAM are required to conduct a full course rating to reevaluate the golf course. There are two reasons: (1) there are instances where golf courses have several small changes that impact a course's difficulty and (2) to re-rate the golf course according to the most updated version of the Course Rating System™ built from continuous research by the WHS (with the USGA and R&A). The system also requires that a course is remeasured on the same cycle.

New constructions are rated initially before or shortly after the course is opened, and then again within five years of its first rating. This is because golf courses mature and can change dramatically over these first several years.

Likewise, when renovation projects or natural factors change the golf course significantly, the club should request GAM to provide an opinion on whether a full or partial re-rating is necessary. Several factors, especially those that impact the length of the golf course, will have an outsized impact on playability, and will therefore prompt an increased need for a partial or full rating. If only a few holes are modified or changed, GAM may recommend a partial rating, where a smaller team will modify the previous rating on select holes. The final factor of whether GAM would recommend a full rating is the length of time since the previous rating. If the current rating is nearing its ten-year re-rating, there is a higher probability of the course being recommended for a full re-rating in advance of when it is due.

What happens if a course rating is not conducted by its due year?

Course ratings are issued for a ten-year period from the date of the rating. For example, if a course was last rated in 2015, then its rating would expire in 2025, and be contacted to schedule a 2025 rate date. GAM uses a year of expiration rather than a specific date, meaning that those ratings expire at the end of the active season in that year -- October 31.

Unless a temporary rating extension is granted (generally due to approaching construction or course modifications), GAM is required to inactivate all expired ratings during the offseason following their expiry. When ratings are deactivated, rounds played on the course are no longer eligible for score-posting purposes. If a lapse in an active course rating occurs, when a re-rate is scheduled and payments (if required) are complete, a temporary rating may be put back into effect, if eligible, until the new rating is completed.

Is there a cost for a course rating?

Existing GAM Member Handicapping Clubs and Member Golf Courses in good standing receive full course rating services at no charge at each WHS-required interval. Charges for additional non-required ratings or because of a major change are evaluated on a case-by-case basis.

New GAM Member Clubs and Courses are required to pay a new member setup fee and prepay two years of club/course membership dues.

GAM does ask that the club provide a modest lunch for the raters who volunteer their time and the necessary golf course access required to complete the rating process.

What are the new eligibility requirements for a course rating?

Under the *Rules of Handicapping*, as revised in 2024, a course (or tee) must be greater than 750 yards for nine holes to be eligible for a course rating.

GAM was thrilled to participate with two of our member clubs in the score and rating testing studies conducted by the USGA and WHS. Several more shorter-length courses that now qualify have been pre-rated in 2023 or were completed in 2024. We will continue to rate more of these courses in 2025 and into the future.

If your facility has a newly-eligible course to be rated, please contact Hunter at hkoch@gam.org for more details.

What about 9- and 27-hole courses?

Much of this guide specifically discusses the activity at a standard 18-hole golf course. Thirty-six or greater hole facilities are broken up into separate 9-, 18-, or 27-hole segments.

Twenty-seven-hole courses have a similar rating process to an 18-hole facility, with the exception of requiring more raters to be present. On measuring day, generally, two teams will complete 13 and 14 holes respectively with about 6 to 8 total raters to split between the teams. On rating day, three teams will rate the golf course, one on each nine. As a result, a typical 27-hole course rating could require up to 18-24 raters.

Nine-hole courses work substantially differently as the measuring and rating process is completed from start to finish in one day. A team of 4-8 raters will conduct the measurement first in the morning and then come to the clubhouse to do data entry and print rating documents for the course rating to be conducted. The team will then rate the golf course in the late morning followed by lunch and golf.

What do captains discuss with club administrators and/or the superintendent?

Captains will be in contact with club administrators and the superintendent about a range of topics. The first is the schedule of the day in which the captain will confirm times and communicate with the club about any conflicts or issues that arise.

The second is to ensure that the rough height and green speed measurements to be used are accurate for everyday play. Incorrect measurements in these two factors have an outsized impact on the final rating values.

Finally, captains want to ensure that the rating process is done comprehensively. They will often ask questions regarding certain elements of the golf course to better understand how the club and its members treat certain obstacles and challenges presented. One key factor of the entire rating process is to standardly ensure that the golf course is rated for not only mid-season conditions but also the way the golf course is played daily.

Can I observe the process?

Club administrators and members are welcome to observe both days of fieldwork in a mutually beneficial way, both for the club to learn more about the system, and for the teams to better understand the golf course. We do ask that the number of individuals is limited, however, for the efficiency and timeliness of the process.

If you, another staff person, or a member would like to be an observer at the measurement or rating day, it is recommended to please communicate that with your captain prior to that date for planning purposes. It is our hope to be able to have you or any observers ride along with an experienced rater for the fieldwork, if possible.

How should I use the confirmation document I receive?

Following the scheduling of course rating date(s), GAM will send the club a confirmation document, which includes many scheduled details that form the itinerary of the day for both your club and for the rating team. Please review this document.

As a club administrator, you may want to pass along the confirmation document or notify other staff at the club who will play a role in the rating team being on site. While course raters can be identified visually by wearing white or blue shirts (often with GAM's logo) with khaki pants/shorts, they intend to cause as little disruption as possible to the day-to-day operations of every club visited.

How should I correctly setup my tee markers prior to fieldwork days?

On the confirmation document, you will notice the first thing on the checklist for each day is to ensure that the tee markers physically on the golf course are placed where they would be found for average daily play. As length is the most impactful factor in a course's ratings, it is extremely important that the course is measured in accordance with the average placement of any tees.

When a tee is often moved between multiple tee pads, please place the tee markers on the pad in which it is most often played from.

If two sets of tees are played from the same yardage (and two different sets of tee markers exist), please place the tee markers side by side of one another. When multiple sets of tee markers are paired, that means that the measuring team will measure them as one tee placement. If two (or more) sets of tees are on the same pad, but are not paired immediately next to one another, the rating team will divide the pad equally, giving each tee its share of the pad being measured.

If a new set of tees is being added that does not currently exist on the course, it is preferred that you discuss with your captain a way to mark each of these new placements with an item such as a small marking flag.

Because yardage is so important, our measurement and rating teams will take extreme caution to ensure that the course is properly measured. Please be sure to ask any questions that you have to your captain prior to the measurement regarding tee placement and be available to answer any questions from the team that may arise.

How does tee placement impact golfers?

Having an inaccurately measured golf course due to not properly setting up and communicating with the measuring team can make an impact on the Handicap Index of golfers who regularly play your golf course.

It is additionally very important that the tee locations chosen accurately reflect the average daily play of the golf course. Intentional manipulation of tee placement to achieve a certain measured yardage violates the *Rules of Handicapping* and can hurt both your frequent players when playing others, or vice versa.

Why does the course rating team rate certain tees?

GAM strictly follows and exceeds all USGA/WHS requirements and recommendations in regard to rated tees. As a result, provided that the tee meets the minimum length requirement of 750 yards for nine holes, all tees are rated for men, and all tees up to at minimum 6,500 yards (18 holes) are rated for women. Upon request, or at the discretion of the GAM Course Rating Staff, GAM will rate even longer tees for women.

While all of these tees must be rated, not all are rated by individual raters on course. Specific rules exist within the Course Rating System to allow for extremely long or short tees to be rated through a replication methodology using the data from other tees that are rated. These methodologies reduce the number of raters required and safeguard the accuracy of the WHS. GAM uses these methodologies whenever possible.

When should I contact GAM about needing a new rate/revision?

AS SOON AS POSSIBLE. Contact Hunter at hkoch@gam.org to discuss and develop a plan.

It is important to contact GAM as soon as possible to notify of any need for new rating, partial rating, or in-office edits to your course rating information. If you have any questions about a potential need for course rating services to be provided, please ask those as soon as possible.

With plenty of advance notice, most requests can be accommodated for. The earlier GAM is contacted, the earlier a rating/edit can be completed, and the more conveniently a rating can be fit into your club's schedule.

I want a re-rate and have my data for scorecards. When should I schedule?

Do not wait to contact GAM to build a plan and/or schedule.

If you want your ratings back for new scorecards next season, do NOT wait until spring to be re-rated. Courses who want an early re-rate should attempt to have the course rated by mid-October in the previous season to when they want to activate the new ratings.

Early-spring ratings are limited to only specific circumstances due to low availability of raters. Waiting until spring can mean you will not receive your results until close to, or after your scorecard company would require.

Will our ratings change?

Going into each re-rate our course raters and GAM will not be able to completely estimate the effect of any course change. Due to the changes in the system through the years, objective nature of the process, and complexity of the formulas in the Course Rating System, no one will be able to accurately predict potential changes.

Can I see the course rating data?

Besides measurement-based information, course rating teams are barred from sharing any specific rating values or information with the club. Only the captain/team leader or GAM staff should communicate with the club staff regarding course rating information to ensure only shareable measurement information or final rating information is shared with the club. Following processing, GAM will provide the final new ratings and a measurement report.

General club members should not ask GAM for any course rating based information. Only club staff, or staff designated individuals may receive any course rating related reports that are not available to the public.

GAM's handling of course rating data is done in this fashion to not interfere with the objective process laid out in the Course Rating System. Subversions of these protocols may jeopardize the integrity of the data produced.

Why did our rating change?

When a course is re-rated, sometimes the ratings stay quite consistent, sometimes they go up, and sometimes they go down. When ratings change, GAM is able to attempt to explain those changes to club staff with what ever shareable information is available.

Changes often fall into multiple buckets. For one, every four years, the Course Rating System is modified by the WHS to be in tune with what the best data tells us about the direction of the game. Second, over the course of ten-years, a course can and does change more than the eye can tell -- whether that means that green speeds have increased, maintenance practices have changed, or other factors. The Course Rating System is designed to provide a standard measure of difficulty for handicapping purposes across the world. It is important to consider these ratings are a standard measure versus all courses in the world, not against the former rating or the other courses in the area.

Is course rating objective or subjective?

Nearly all of the overall Course and Slope Rating of a golf course is entirely calculated from objective data measurements taken and refined into standardized rating values throughout the process. All subjective elements (comprising less than one percent of the final ratings) are gathered through rating team consensus and with stringent criteria defined in the Course Rating System.

How is the golf course measured for gross length?

Golf courses are measured with one of two different pieces of technology (GPS or EMD) which use the same methodology to complete a length verification or gross length measurement. This gross measurement of each hole from each tee set is the length of the golf course's individual holes and is included in the final rating materials. Please feel free to use these official measurements to update your scorecards or other materials at your discretion.

Each hole measurement begins at the teeing pads. Each tee set is measured from the midpoint of its teeing area. For example, if a tee pad only has one tee set on it, then the starting point for the hole is at the midpoint of that pad. If two sets were present on that pad, then each set would get its own half of the pad, and then the midpoint of each respective section would be used for the corresponding tee set. When the tee markers are placed identically together, the hole is measured for both tees from the same midpoint.

While one measurer is evaluating the midpoint locations for each tee set, other measurers are selecting pivot points along the hole and placing reflectors (in the GPS method, pivot waypoints are determined in the same locations as the team progresses down the hole). These pivot points are the natural turns or doglegs designed into the layout of a hole. They follow where the designed line of play exists. One or more pivot points may be placed on a hole (for par-3's there are generally no pivot points). Finally, the team places a reflector at the green front -- this spot is the origin point for measuring green dimensions.

Each individual segment of the hole (from each tee to the first pivot, pivot to pivot, and pivot to green) is measured independently (or computed from GPS waypoints). Half of the green depth is also added for the green front to green center measurement. All of these segments are added up through our data worksheets and totaled for use on the Form 1's on rating day.

How is effective playing length evaluated?

Effective Playing Length is equivalent to the measured length of the golf course, plus or minus corrections made by the rating team.

Roll occurs when the ball, once it comes out of the air in the landing zone, will roll less than or greater than the average 15-25 yards on a full shot.

Elevation considers the playability and length effect changes because of tee-to-green elevation change on the hole and adjusts the effective playing length accordingly.

Dogleg corrections occur when the scratch or bogey player can cut across a corner with a measured pivot point (reducing the effective playing length) or is obstructed from doing so and is therefore not able to hit a full shot (increasing the effective playing length). Subsequently, a **Forced Lay-up** also occurs when the scratch or bogey player is not able to hit a full shot (increasing effective playing length), due to a crossing or punitive obstacle.

Wind adjustment is determined by the average daytime wind speed during the midseason; this data is maintained by the GAM in cooperation with data from the National Weather Service.

Altitude is considered for courses greater than 2,000 feet above sea level; in Michigan, no courses qualify for this correction.

How are obstacle factors evaluated?

Each obstacle factor requires several data measurements on the golf course which are then calculated into an obstacle value via the standardized tables and adjustments found in the Course Rating System. Each obstacle is thus assigned a value of 0 to 10 for both the scratch and bogey players on each hole based on these criteria.

Topography is an evaluation of the impact of terrain on play. It is calculated from an evaluation of the stance and lies in the landing zones and the elevation change of the approach shot.

Fairway is an evaluation of the difficulty of keeping the ball in the fairway from tee to green. It is calculated by the width of the fairway in the landing zones and the length of the hole. A longer hole has more shots and longer shots with greater dispersion and therefore has more probability of missing the fairway.

Green Target is an evaluation of the difficulty of hitting the green with the approach shot. It is calculated from the size of the green measured as an "Effective Green Diameter" (EGD) and the length of the approach shot. The EGD is more or less the average diameter of the green surface, with safeguards and adjustments in place for narrow, oddly shaped, or highly sloping green surfaces. False fronts and sides are also not included in a green's dimensions for EGD purposes. Longer approach shots have greater dispersion, causing higher values.

Recoverability and Rough (R&R) is an evaluation of the probability of missing the fairway landing zones and the green, and the difficulty of recovering if any are missed. It is calculated by the Green Target obstacle value (to see how difficult it is to hit the green) and the average rough height throughout the golf course. This measurement is taken on measuring day and captains will confer with club staff and/or the superintendent to ensure midseason accuracy. Adjustments are made for things such as mounding and abnormal rough heights.

Bunkers is an evaluation of how bunkers come into play and how difficult they are to recover from. It is calculated from the green target value (of how difficult it is to hit the green) and the portion of the green's circumference that is closely bordered by bunkers. Adjustments are made for bunker depth, as well as factors relating to fairway bunkers along the line of play.

Crossing Obstacles consist of penalty areas, extreme rough (including desert), and out-of-bounds which are carried to play the hole. Crossings require the measuring and rating teams to establish a point at which the player(s) safely carry a crossing obstacle, standardized as ten yards past the obstacle. The distance from the tee or landing zone preceding the crossing to the safe carry point is measured or calculated from pre-recorded data and input to the tables.

Lateral Obstacles consist of penalty areas, extreme rough (including desert), and out-of-bounds when they come into play laterally on the hole. It is calculated from the distance from the center of the landing zone or green to the obstacle and the distance of the hole segment preceding the landing zone. Again, shot dispersion is a critical component of the table design. Adjustments are made for playability, bounces towards and away, and stroke and distance situations.

Trees are an evaluation of the overall impact of the trees, and their recoverability, on the play of the hole. They are evaluated through seven factors that measure the impact of trees on scoring and adjustments are made for obstructions and chutes.

Green Surface is an evaluation of the difficulty of chipping and putting on each hole. It is calculated through a measured average green speed on the golf course and the slope, contouring, and tilt of each green. The measurement of green speeds with a stimpmeter is taken on measuring day and captains will confer with club staff and/or the superintendent to ensure midseason accuracy.

Psychological is an evaluation of the cumulative effect of obstacles on a player's score. This obstacle value is calculated by the computation software following data entry and is comprised of the cumulative impact when three or more obstacle values of five or greater exist throughout the other nine obstacles.

After the Rating

Making the next score count, accurately.

by Mike Brady, GAM Course Rating Captain

Will your GAM/USGA/WHS issued Course Rating remain relevant?

Will your golfers' Handicap Indexes travel accurately?

When a course is rated by a GAM rating team using the WHS Course Rating System™, there are important things to remember about how this rating works, and how it will impact golfers at your club. The purpose of the rating was to measure the difficulty of the course under normal playing conditions in order to determine a Course Rating and Slope Rating unique to your course. Course Ratings are meant to be effective for 10 years (new courses have a five-year rating).

Before doing the fieldwork for your rating, we ask that the course be set up as it would be on an average day of play. This principally applies to tee locations but also may include course conditions such as; Fairway Width, Green Size and Speed, Rough Height, and Bunkers. These are the fundamental attributes your Course Rating is based on. If the usual conditions of the course during the midseason are inconsistent with what is present on measurement or rating day, the captain of the rate must know so they can make appropriate adjustments for what the course plays like during standard midseason conditions.

Per the *Rules of Handicapping*, it is the responsibility of the Handicap Committee and management at every golf course to: "Maintain their golf course in a manner consistent with the Course Rating..."

When golfers' Handicap Indexes "don't travel well" it is often due to changes to the golf course such that it no longer plays as it was rated. If changes are made to the golf course that makes it more difficult and the Course Rating goes unchanged, the golfer's handicap may be overstated. Contrarily if the changes make the golf course less difficult the golfer's handicap may be understated.

The practices of your maintenance staff can have a significant impact on your Course Rating. Increasing green speeds or rough height can adversely affect the accuracy of your Course Rating. For example, increasing the green speed from 9'5" to 10'5" can increase the Course Rating by about .2 strokes and the Slope Rating by one point. Increasing rough height from 2 ½" to 3 ½" on all 18 holes can add about .7 strokes to the Course Rating and 5 points to the Slope Rating.

Ultimately, the most critical component of your Course Rating is the effective playing length of your golf course as was measured for each tee location on rating day. Tee locations should be balanced day-to-day as is reasonably available from a maintenance standpoint and overall yardage should remain as consistent as possible. Failing to do so can impact your golfers' handicaps. For example, placing tee markers 10-yards behind the measured location on each hole adds 180 yards to the effective playing length and would in turn increase the Course Rating by up to .8 for men (1.0 for Women) and can raise the Slope Rating by 3 points. Greater increases in yardage will have an even larger impact. It is most important to maintain the effective playing length of your golf course to maintain the accuracy of your Course Rating and your golfers' handicaps.

Changes to the golf course and/or its setup may adversely affect the Handicap Indexes of your golfers. If you are in doubt as to the impact of course changes to your Course Rating you are strongly advised to contact GAM staff (Hunter Koch - hkoch@gam.org) to assess the need and/or options for a full or partial re-rating.