

The (Almost) Comprehensive
PURDUE PINWOOD DERBY
2026 Event Guide and Rule Book



Revision 1.0

PurduePinewoodDerby.org

Race Day - April 18th, 2026

WALC Basement

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From the Purdue Pinewood Derby Executive Director

Welcome Racers!

On behalf of the Pinewood Derby staff and Scouting Purdue, we are THRILLED to welcome you to the first-ever Purdue Pinewood Derby! This is going to be an epic day of reliving your childhood memories of turning a tiny block of wood into a champion race car finally getting to make the race car you've dreamt of making for years.

This race is designed to be for everyone at Purdue (there is something for everyone!!!). Purdue students (including both undergraduates and graduates), faculty, and staff are invited to join in. Those interested in reliving their Pinewood Derby glory days and want to mimic the classic race and rules can join in our Classic Division. Those wanting to push their engineering creativity to the limits can enter our Advanced Division where the rules are more flexible. You can also enter as a team in Advanced! For those who are not interested in having the fastest car, you can still have fun by coming up with the coolest car, the Purdue-iest car, or the slowest legal car. See, literally everything for everyone!!!

This is our inaugural year running this event, and from my (very brief research), possibly the first ever Pinewood Derby at Purdue for Purdue! We are eager to get this race going and learn about how we can improve. As issues and oversights come up, we want to work with you so that we can improve this event for years to come.

This document serves as the official source of truth for logistics and rules for your reference as you design, build, and race your own car. If you have any questions, please [contact us](#) so we can help you out!

See you on April 18th and happy building!

Yours in Scouting,



Gahn Mungarndee

Purdue Pinewood Derby Executive Director
Scouting Purdue

Overview

The Purdue Pinewood Derby is an event where students, faculty and staff from every major, department, and organization on campus are invited to design, build, and race their own Pinewood Derby cars in a competition surrounding engineering and creativity!

Race Information

Race Location

- WALC Basement

Race Date

- Saturday, April 18th, 2026

Race Time

- Check-in: 11:00 AM
- Race Starts: 12:00 PM
- Race Ends: When cars finish racing
- Award Ceremony: 5:00 PM

What is a Pinewood Derby in General?

- A Pinewood Derby is a racing event in the Cub Scouts program, a youth development program for grades K-5.
- Participants build small cars out of a block of pine wood, add wheels and weights, and then race them down a 35-foot track.
- It is hands-on and easy for beginners, which makes it great for Cub Scouts.
- Prizes are often awarded for both speed and design.

Why Should You Join?

This event is designed to bring students together across majors, departments, and organizations. Whether you are in engineering, an art major, or someone who just wants to build something cool, this event is for you! You might even walk away with a prize and trophy.

Important Dates

- Callout & Painting Workshops:
 - 3/26 - SCHM 112 - 6PM-7PM
 - 3/31 - SCHM 112 - 6PM-7PM
 - 4/6 - SCHM 112 - 6PM-7PM
 - 4/8 - SCHM 112 - 6PM-7PM
- Build Day: 4/4 - BIDC - 9AM-12PM
 - Sign up sheet [here](#)
- Race Day: 4/18 - WALC Basement - 11:00 AM - 5:00 PM

Race Registration

Division Overview

Classic

1. Follows the classic Scouting America Pinewood Derby [race rules](#) and is meant to mimic the classic Pinewood Derby event you know and love.
2. The Classic Division is only for individual participation. There is a limit of 1 person per registered car.
3. An individual may only be registered to 1 car in the Classic Division but may still participate in the Advanced Division.
4. Registration is \$5 for students and \$10 for faculty/staff.

Advanced

1. Fewer restrictions compared to the Classic Division. We encourage students to creatively engineer their car to win!
2. The Advanced Division is open to individual or team participation. This could be 1 or more people per registered car.
3. An individual may only be a part of 1 team in the Advanced Division but may still participate in the Classic Division.
4. Registration is \$10 per registered car for students, faculty, and staff.

How to Register

Sign Up

1. Come to a callout (optional)
2. Fill out the [registration form](#)
3. Pay the entrance fee with cash or at tradingpost.scoutingpurdue.org

THE LAST DAY TO REGISTER IS APRIL 15TH
THE LAST DAY TO PICK UP A CAR IS APRIL 16TH

Picking Up Your Car

- Have you purchased, or plan on purchasing, a registration at a callout? You can pick up your car right at the event!
- Otherwise we will contact you by email to arrange a time and date for pick up.

Cost to Enter

	Students	Faculty/Staff
Classic Division	\$5	\$10
Advanced Division	\$10	\$10

Race Rules

Derby Definitions

1. **Car:** A fully registered and paid for car that complies with all the rules of that car's registered division and has been assigned a number.
2. **Car Body:** The main section of the car that connects the wheel axles to the other parts of the car.
3. **Racers:** The individual or team members officially listed in the registration of a particular car.

4. **Executive Director:** Has the final and absolute say on any debate or situation during the race regarding rules, regulations, and conduct.
5. **Did Not Finish (DNF):** Given to cars that fail to reach the end of the track and have come to a full stop somewhere along the track.
6. **Accident:** Similar to a DNF but is the result of an accident (any unintentional outside force) causing the car to not finish or impair its performance. Accidents and DNFs will be determined by the Executive Director at the moment given the situation. (Ex. losing a wheel mid race or car coming into your lane).
7. **Quick Repair:** A quick repair refers to any modification and repair made to the car after check-in that is allowed following an Accident or DNF. The race however will not slow down and the car must be ready prior to the start of their next race.
8. **Warning:** Given by the staff to cars that violate any rule for the first time.
9. **Disqualified:** A car that has violated multiple rules after being given Warnings or that the Executive Director has decided can no longer participate. Cars disqualified are forbidden from continuing their remaining races and are illegible to receive any trophy or prize.

General Rules

1. All payments are non-refundable.
2. Must be a student (undergraduate or graduate) faculty, or staff at Purdue to register a car and participate.
3. No car can display explicit content, must be PG-13, and must follow [Purdue's rules on freedom of expression](#).
 - a. Staff will judge the cars during Check-In. Any cars deemed to violate these rules will be given an opportunity to modify their car until Check-In has closed.
 - b. Cars that fail to meet these standards by the time the race starts will be disqualified.

4. Cars are expected to complete each race in under 10 seconds. Failure to do so will result in a DNF.
 - a. Cars that receive less than 3 DNFs will be given Warnings and allowed a Quick Repair.
 - b. Cars that receive a 3rd DNF will be disqualified.
 - c. Situations that are determined to be an Accident by the Executive Director will not count towards the 3 DNF rule.
5. Cars are expected to be ready at the start of every race. Failure to show up at your race will result in a Forfeit.
 - a. If a car forfeits 3 races they will be disqualified.
6. Every individual and team is responsible for making sure their car follows these guidelines
7. In the event of an Accident or a DNF, individuals or teams are allowed to make Quick Repairs to their car using the tools provided at the event or personal tools brought to the event.
8. All cars are expected to not damage the track or leave any mess or residue after each race. First two offenses will result in a Warning. A third offense will result in disqualification.
9. Cars cannot intentionally affect other cars during a race. Cars found with a design or mechanism that intentionally affects other cars will be disqualified.
 - a. If your car was negatively impacted by another car in a race, you will be allowed a rerun of that race.
10. Cars must remain complete throughout the entire race with no detachable parts.
11. Cars must remain in their own lane and be in contact with the track at all times.
12. Cars cannot expand outside the listed size restriction throughout the entire race.
13. Cars are expected to not pose a threat to other people and staff. All cars must be safe to grab and can not have any sharp blades, needles, or other features that might harm someone.

14. Ultimately, our goal is to allow for interesting ideas and engineering, but if the Executive Director deems a particular design to be too unsafe or in violation of any rule, it will be disqualified.

Classic Division Rules

1. Width of the car shall not exceed 2-3/4 inches.
2. Length of the car shall not exceed 7 inches.
3. Height of the car shall not exceed 6 inches.
4. Weight of the car shall not exceed 5 ounces
5. Axles, wheels, and body shall be from the materials provided in the kit or from official Scouting America materials.
6. Bearings, washers, bushings, and anything not provided in the kit or are not official Scouting America materials are prohibited from being used on the wheels and axle.
 - a. These can still be used as weights.
7. No lubricating oil may be used.
 - a. Axles may be lubricated with powdered graphite or dry silicone.
8. The car shall not ride on any kind of spring.
9. The car must be free-wheeling, with no starting devices/mechanisms.

Advanced Division Rules

1. Inner distance between the wheels shall be at least 1-5/8 inches.
2. Width of the car shall not exceed 3 inches.
3. Length shall not exceed 8 inches from front of the car to the back of rear wheels.
4. Height of the car shall not exceed 6 inches.
5. Ground clearance shall be at least 1/2 inches.

6. Weight shall not exceed 32 ounces.
7. There are no prohibited materials for the car body or any mechanisms.
8. Prohibited methods of acceleration:
 - a. No pyrotechnics, explosives, or open flames.
 - b. No compressed gas canisters of any kind over 60 psi (racer's must be able to prove the psi of all pressurized gas).
 - c. No outside forces acting on the car. (ex. a racer standing next to the track to push their car down).
 - i. Use of sensors, radio controllers, or other methods to activate any mechanism is allowed as long as the racers stand outside the track area once the race begins.
9. All acceleration mechanisms must be self-contained in the size restrictions.

Awards, and Prizes

Placement Trophies

- Trophies will be given out to each of the 1st, 2nd, & 3rd placed cars of the Classic and Advanced Division.
 - Classic Division prizes:
 1. Skull Candy Dime 3 earbuds
 2. Anker Soundcore 2 Bluetooth Speaker
 3. Logitech Wireless Mouse
 - Advanced Division prizes:
 1. 4x 50 yard line seats to Purdue's First game of the 2026 season versus Indiana State plus a Lot A tailgate parking pass.
 2. Tecaki 1080P HD portable Bluetooth and WIFI projector
 3. A Purdue themed Monopoly board
- Ranking will be determined by the average time it takes a car to go down the track of 7 races (the slowest race is dropped). Each car will have the opportunity to go down each lane twice. Time will be recorded using the tracks built in laser system and timer from when the start lever is pulled to when the laser at the finish line gets tripped.
- During the closing ceremony each car owner/team will receive the prize that was promoted along with a gift receipt for the item. If an issue occurs with your prize

please reach out to us through our email (scouting@purdue.edu), Discord, or Instagram so we can compensate with a prize of equivalent value.

Special Awards

- **Purdue-iest Award:** An award given to a car from either division that best embodies Purdue and its traditions/culture.
 - This award is meant to recognize cars based on the design, color, and creativity of how it illustrates a Purdue centered theme throughout the whole car.
 - This includes any symbol, logo, color, or landmark that is usually associated with Purdue University or the West Lafayette area.
 - This award will be determined by a group decision made by the Pinewood Derby staff following the conclusion of all the races.
- **President's Award:** This award is given to a car from either division that Scouting Purdue's President feels best exemplifies Scouting Spirit on and off the track.
 - This award is meant to recognize cars and their owner/team for qualities including attitude, friendliness, sportsmanship, and others that are usually associated with Scouts.
 - This award will be selected by Scouting Purdue's President following the conclusion of all the races.
- **People's Choice Award:** This award is given to a car from either division that has the most support of the people and is the people's champion.
 - This award is meant to recognize the car that has the most support from spectators and other racers throughout the race on and off the track.
 - The award will be determined by spectators and racers present the day of the race, who will be asked to write the number of the car they believe deserves this award on a piece of paper. The paper will then be dropped in a box and tallied at the conclusion of all the races.
 - In the event of a tie, the Pinewood Derby staff will make a tie breaking decision.
- **Slowest Car Award:** This award is given to a car from either division that may not be at the top of the leaderboard but still makes the effort to finish the race.
 - This award is meant to recognize the car that consistently crosses the finish line last throughout all their races.
 - The Award will be determined by the car with the slowest average time across their 7 races.

- To be eligible for this award, it is expected that the car still makes it over the finish line and travels down the whole track. Each car is allowed 2 DNFs before that car becomes ineligible for this award.
- After the conclusion of all the races in the event that there is a tie, all contending cars will race down together regardless of each car's designated division, one time with the car that finishes 4th of that specific race being awarded the Slowest Car Award.

Race Day Logistics

If you would like to participate but cannot be physically present, we can race your car for you! You can still win awards and prizes.

Provided on Race Day:

- Scale
- Super glue
- Hot glue gun
- Graphite lubricant
- Hand drill for cars that exceed weight limit
- Extra weights
- Sharpies and stickers for numbering

Race Procedure (for Advanced Division)

- Advanced division cars may want to include a timing or trigger mechanism so that their velocity mechanisms activate at an appropriate time. In order to allow adequate preparation for this, the following procedure will be standard for advanced division races:
 - Cars will be brought to the track by a single racer
 - One representative from each team will have 90 seconds to prep the car. Cars that fail to prepare at the end of the 90 seconds will forfeit the race.
 - Directly after the 90 second mark, there will be a 5 second countdown to start the race. A staff member will then release the pins to send the cars down.
 - **Note:** the start pins will be manually released. Therefore, the 5 seconds can not be guaranteed with precision. Expect ± 1 second.

- One representative from each team is required to retrieve their car and then turns it in to the staff to be placed in the waiting area unless the car requires preparation of any sort (Ex. changing battery, re-arming mechanism, etc.)
- For more details and a diagram of the start pin, see the hyperlink in “track information”.

How to Prepare

1. Pick up your car kit
2. Attend a build day or go on your own time
3. Attend a paint day to decorate your car
4. Show up on race day!

Building your car

- The Bechtel Innovation and Design Center (BIDC) has a woodshop which is open MTWRF 9am-9pm and Saturday 9am-5pm.
 - Hand tools (saws, drills, sandpaper, etc.) can be used as a walk-in.
 - Power tools (bandsaw, table saw, etc.) can only be used with a woodshop TA supervising. You can go into Bechtel during any standard hours to schedule a reservation with a woodshop TA.
 - Note: Before using ANY tools at BIDC, you must complete their safety quiz. You can talk to their front desk to get the link to this quiz.
- For painting, come to any of the listed paint day/callout nights to use our paint supplies.

Example Cars



Scale Information

- For Check-In, the cars will be weighed on a scale accurate within one thousandth of an ounce (0.001 oz).

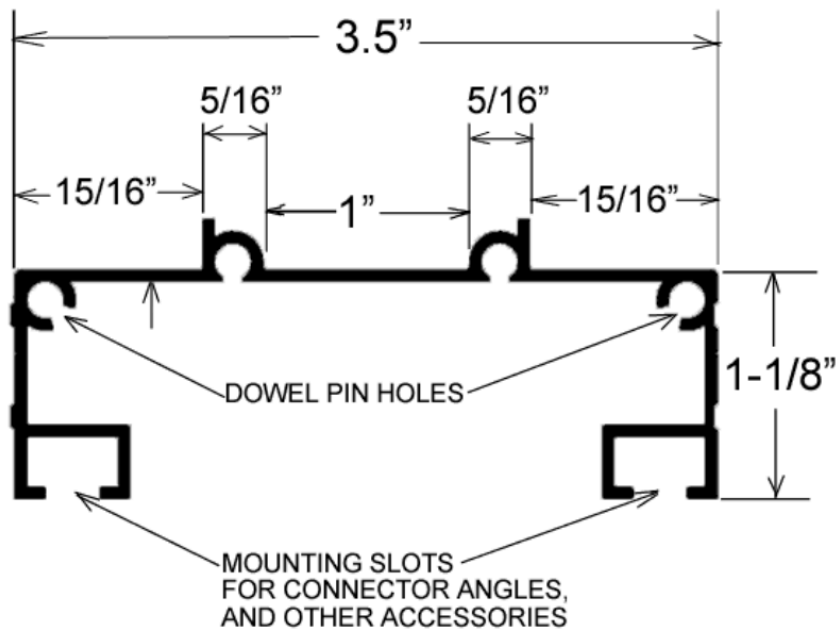
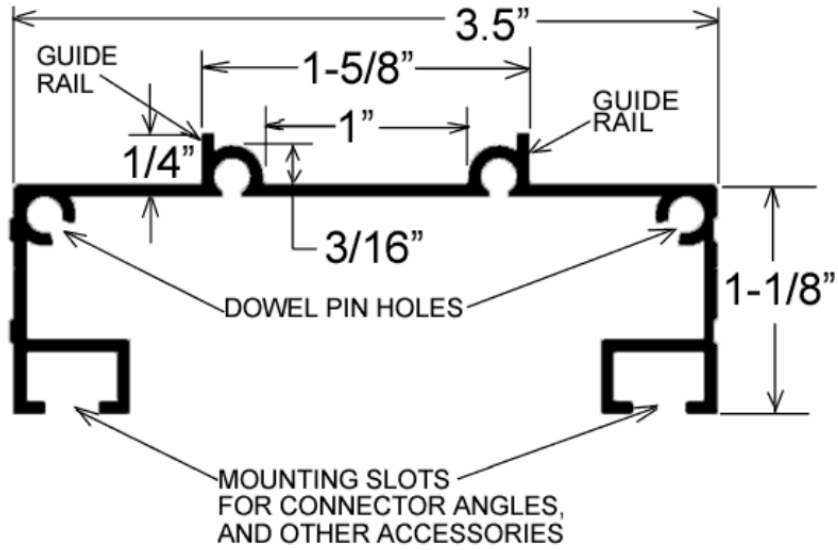
Track Information

- Our track is 35 feet long with 4 lanes. The specifications and exact measurements can be found [here](#).

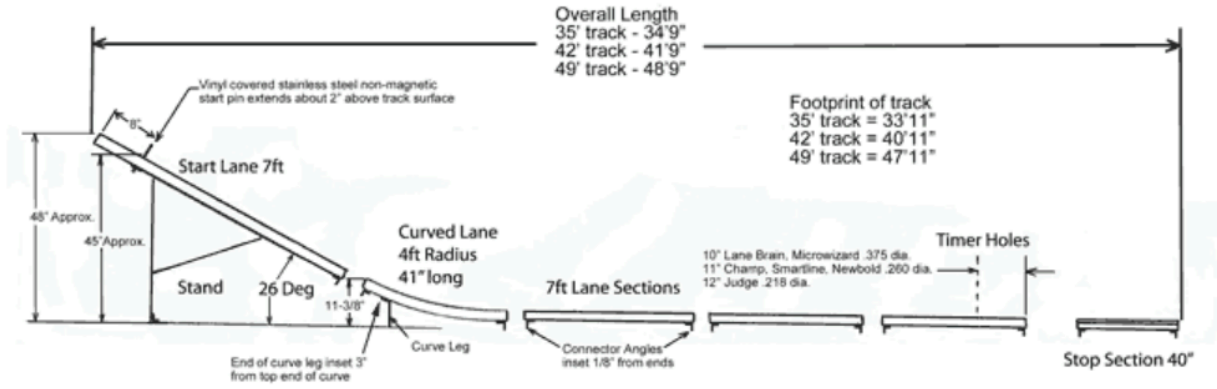


For reference only - previous rules still apply

END VIEW OF SINGLE TRACK LANE



For reference only - previous rules still apply



About Us

Contact Information

- Website: PurduePinewoodDerby.org
- Instagram: @PurduePinewoodDerby
- Email: scouting@purdue.edu
- Pinewood Derby Discord: <https://discord.gg/3bTnT5mWWf>
- Pinewood Derby Linktree: <https://linktr.ee/PurduePinewoodDerby>

Scouting Purdue

Scouting Purdue is a student organization that continues the long tradition of Scouting at Purdue University. For more than a century, Scouts have grown into leaders who carried their values into classrooms, careers, and communities. Our group brings together students, alumni, and friends who live by the Scout Oath and Law and want to keep the spirit of Scouting alive on campus.

Our mission is to build a fellowship-based service organization rooted in Scouting values, dedicated to leadership, cheerful service, and personal growth.



SCOUTING PURDUE

Eagle Scouts and Scouting Alumni

Changelog

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