

NCCC High Speed Driving School Recommended Guidelines (Effective 1/1/10)

The following elements are recommended for inclusion in all High Speed Driving Schools in order for the NCCC Competition Committee to grant approval as a certified school that can qualify graduates to receive a High Speed Certificate. This guideline gives recommended minimum durations and numbers of “on-track” instructional sessions in order to provide the beginner with the minimum seat and instructional time needed to qualify for a NCCC High Speed Certificate upon successful completion of the curriculum and several follow-on, observed, track sessions in the same day.

Instructors:

1. Experienced open track drivers
 - a. Graduated from professional school (Bondurant, Miller, Barber, Spring Mountain., etc.)
 - b. Completed Instruction with NASA, SCCA, etc.
 - i. Certified for advanced group (open passing)
2. One instructor per student in each initial student group
 - a. I.e., break students into group’s small enough for one-on-one in car instruction through first student driving session.

Classroom Instruction – Safety Rules & Procedures, Driver Readiness:

1. Event Safety Rules and Procedures
2. Car Safety Preparation & Technical Inspection Criteria
3. Comply with all NCCC Rulebook Requirements
4. Brakes
 - a. Pads – new or having good remaining thickness & minimal taper
 - b. Brake Fluid – fresh & bled
5. Clutch (if applicable)
 - a. Properly adjusted
 - b. Fluid – fresh & bled
6. Tires
 - a. Proper inflation
 - b. Sufficient tread depth
7. Driver
 - a. Mentally Prepared
 - a. Willing to Learn
 - b. Forget Preconceived Ideas
 - c. Helmet fit
 - i. Clean visor, sunglasses, etc.
 - d. Appropriate shoes (soft, closed toe)
 - e. Clothes/driver suit per track requirements
 - f. Proper “In Car” Seating Position

Classroom Instruction – Safety Rules & Procedures, Driver Readiness continued:

- g. Proper location on of BOTH hands on the Steering Wheel
 - i. Get hands back to wheel after shifts
 - ii. “9 & 3” is preferred, but some use “10 & 2”
- 8. Grid & Course Safety & Procedures
 - a. Speed (5 MPH) in pits, grid, & track’s “hot stop area” if applicable
 - b. Warm-up lap(s) – tires, fluids
 - c. Cool down lap
 - d. Flag signals per track protocol
 - e. Driver Signals for Exiting the Track

Classroom Instruction - The Track & “On Track” Procedures:

- 1. Course Map
 - a. Review for familiarity
 - b. Identify turns & apexes
 - c. “The Line” & “The Marbles”
 - d. Identify braking zone markers (cones, paint stripes, flags, etc.)
 - e. Watch mirrors
 - f. How to “wave by” faster cars
 - g. Caution Students – Speed Comes With Practice and AFTER mastering basic techniques
 - i. Accelerate smoothly
 - ii. Brake early
 - iii. Finish braking before turn
 - iv. Accelerate smoothly from turn apex
 - 1. Throttle Management
 - 2. “Roll” into throttle
 - v. Look ahead
 - vi. Turn entries should minimize the sharpness of the turn
 - 1. Braking versus “Lifting” to achieve “turn-in” control
 - 2. **No trail braking for beginners**
 - vii. When/where on track to check gauges
 - 1. May not be applicable or appropriate on some tracks
- 2. Smooth shifts, not speed shifts
- 3. Both hands on wheel UNLESS Actually Shifting
- 4. Heel-toe rev matching for stick shift cars
 - a. Practice is required here
- 5. Braking with/without Anti-lock Brakes, as applicable
- 6. Spin and/or off track procedures
 - a. Brake, stop, recover
 - b. Both Feet In (stick shift cars)
 - c. Steer “INTO” direction of skid if possible
 - d. Controlled braking depending upon surface

Classroom Instruction - The Track & "On Track" Procedures continued:

- e. Don't be a "hero" – adding more power in a slide has 2 possible results → Bad and Worse
- f. Exit track after an "off track" experience to get car safety checked

7. Rules of Passing

a. Pass only when:

- i. ***IF*** cleared by Instructor
- ii. On a ***specifically designated*** "straight"
 - a. Early enough to return to line while on the straight and safely before the braking zones
- iii. ***IF*** "waived by"
- iv. Car being passed must hold "The Line"
- v. Car passing must pass clean & then return to "The Line"

In the car - Follow the Instructor:

1. Learn "The Line" by following an Instructor driving the track at ***moderate speed***
2. ***NO PASSING*** during this session
 - a. Instructor may "rotate cars if more than one car following
 - b. All cars ***MUST*** maintain instructors pace & car-to-car separation
3. Easy Does It!
4. Practice – 10 minutes
5. Check Car – tires, brakes, etc.
 - a. Readiness for the next session
6. Out of car review with Instructor/Observer

In the car - Drive with the Instructor as Passenger:

1. Practice the basics – 10 minutes
2. Watch the mirrors!
3. Identify "The Line"
4. Identify the apexes
5. Smooth turn entry & exit
6. Maintain car balance at all times
7. Where & how to brake
8. Where & how to accelerate
9. Out of car review with Instructor

In the car - First Drive Alone:

1. Practice the basics – 15 Minutes
2. Out of car review & critique with Instructor/Observer

In the car - Second Drive Alone:

1. Continued practice on the basics – 15 minutes
2. Out of car review/critique with Instructor/Observer

In the car - Second Drive with Instructor as Passenger:

1. 10-minute session to demonstrate proficiency in the basics
2. Out of car review & critique with Instructor
3. Instructor assesses student's proficiency and:
 - a. Issues course completion certificate to student "if warranted"
 - i. Student provides to RCD to get NCCC High Speed Certificate
 - b. Clears student for further open track sessions on their own
4. **"Everyone" does not necessarily have to qualify for open track driving!**
5. Student should complete additional on-track sessions the same day to reinforce the lessons learned

Recommendations:

1. Provide handouts
 - a. Track safety rules
 - b. Open track driving guidelines
 - c. Course Map
 - d. Tech Inspection Form
 - e. Reference books & sources
 2. Recommendation for further track sessions:
 - a. Provide "Tree" of Advancement Groupings for students with promotion to next group based upon Instructor/Observer evaluation
 - i. Beginner – no open track experience
 1. Can drive alone after instruction & instructor "sign off"
 2. Must be "under observation" at all times on track
 - ii. Novice – limited open track experience, or
 1. Open track experience not within past 24 months
 2. Less than 2 open track days in past 12 months
 3. Can drive alone under "observation"
 4. Reminder – can be revoked if not following the rules
 - iii. Advanced – extensive open track experience
- Reminder – can be revoked if not following the rules