



DE Classroom Outline

Intermediate

June 1-3, 2018

INTERMEDIATE

SESSION #1

DE Objectives

- ▶ Learn
 - ▶ Keep open mind – listen, then apply
- ▶ Strive for progression
 - ▶ Safe speed before fast speed
 - ▶ Prove you deserve to move up
 - ▶ Stay relaxed & comfortable
- ▶ Have fun!



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Flags

- ▶ Are there to keep you safe
- ▶ You must obey all flags
- ▶ Acknowledge flags

Instruction

- ▶ Listen to instructors – they're here to keep you safe and help you learn
- ▶ Instructors have different experiences, so language may be different
- ▶ What to expect:
 - ▶ Verbal instruction
 - ▶ Hand signals



- ▶ Right-seat steering
- ▶ Feedback, evaluation, commands and support
- ▶ Safety is #1
- ▶ Objectives for every session – set in classroom, and emphasized by in-car Instructors

The Line... What Do We Know?

Reference points:

- ▶ Begin-Braking
- ▶ Turn-in
- ▶ Apex
- ▶ Exit



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The Line... What Do We Know?

Advantages of a Late Apex:

- ▶ Maintain straightaway speed longer
- ▶ Begin accelerating earlier
- ▶ See through turn
- ▶ More time driving straight, less time cornering

The Line... What Do We Know?

Corner Radius vs. Apex:

- ▶ The tighter the corner radius, the later the apex
- ▶ The larger the corner radius, the earlier the apex



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The Line... What Do We Know?

In Slow – Out Fast:

- ▶ Corner exit speed is more important than corner entry speed

The Line... What Do We Know?

Corner Priorities:

- ▶ The fastest corner leading onto the longest straightaway.
- ▶ Next fastest...
- ▶ Fastest corner at the end of the longest straightaway.
- ▶ Next fastest...
- ▶ Fastest corner between corners.
- ▶ Next fastest...



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What Do We Know? Off-Track Recovery

Mindset

- ▶ More to be lost than gained by being a little faster
- ▶ Progression is most important
- ▶ Open Mind – listen, apply, learn
- ▶ Smooth is Fast

Q & A



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On-Track Objectives – Session 1

1. Warm-up
2. Familiarize with track/learn line
3. Vision – look farther head

SESSION #2

Advanced Use of the Controls

- ▶ Steering wheel
- ▶ Throttle
- ▶ Brakes
- ▶ Shifter
- ▶ Mirrors



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Your Tools...

Throttle

- ▶ Wheelspin
- ▶ Weight transfer
- ▶ Squeeze & Ease
- ▶ The Throttle is NOT an On-Off switch

Braking

- ▶ Maximum braking = Threshold braking
- ▶ Squeeze & Ease
- ▶ The release of the brakes is just as important as the application



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Steering

- ▶ The less you turn the steering wheel, the faster you will go
- ▶ Keep steering movement to a minimum
- ▶ Your Steering Wheel is connected to the Throttle & Brake pedal

Cornering

Two areas of control:

- ▶ Directional control (steering wheel)
- ▶ Balance (throttle & brake)

Mirrors



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- ▶ Check your mirrors as often as it takes to always know where others are around you...
- ▶ But no more than that

Heel & Toe Downshifting
Brake first - then downshift.

Q & A

On-Track Objectives – Session 2

1. Focus on smooth/precise control use
2. Seamless transition

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3. Minimize input

SESSION #3

Brains or Brawn?

- ▶ What's driving your car?
- ▶ What percentage of race driving is mental?
- ▶ Brain controls your body, so...

Performance Model

Sensory Input

Quality In = Quality Out

- ▶ Visual



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- ▶ Kinesthetic
- ▶ Auditory

Sensory Input

Quality In = Quality Out

- ▶ More Sensory Input =
- ▶ More References =
- ▶ Fewer Errors =
- ▶ More Speed & Consistency

Mental Programming

Why do you do what you do?



- ▶ Because of your Programming
Why do you NOT do what you want, or are told to do?
- ▶ Your Lack of Programming

Mental Programming

How do you develop mental programming?

- ▶ Physical practice
- ▶ Mental practice:
 - ▶ Mental pre-play
 - ▶ Visualization
 - ▶ Use multiple senses



Vision

- ▶ Look ahead – High Aim Vision
- ▶ Look where you want to go, not where you don't want to go
- ▶ Look through the turns

Q & A

On-Track Objectives – Session 3

1. Sensory Input session – be a Sponge
2. Put whole lap together - consistency
3. Collect mental image of track for tonight's mental replay (visualization)

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SESSION #4

Performance Driving

There are 4 keys...

- ▶ Tire, Tire, Tire, Tire

Key to going fast: *Understanding tires*

Slip Angle

- ▶ The difference between the direction the wheel is pointing and the direction the car is traveling is the Slip Angle.

Traction Circle



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Traction Circle

- ▶ Maximum acceleration...
- ▶ Maximum braking...
- ▶ Trade off braking for cornering...
- ▶ Maximum cornering...
- ▶ Trade off cornering for acceleration...
- ▶ Maximum acceleration

Overlap your braking, cornering and acceleration forces.

Q & A

On-Track Objectives – Session 4



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1. Learn track without cones
2. Build speed
3. Be a Weight Manager - use your car's balance to your advantage

SESSION #5
Learning A Track

The Line...

Compromises

- ▶ Give up one corner for another?

The Line...



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Priorities

- ▶ The most difficult corner?
- ▶ The fastest corner?

Q & A

On-Track Objectives – Session 5

1. Precision – hit apexes, be smooth
2. Smooth throttle application
3. Letting the car run free - minimum steering input

HAVE FUN!

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