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**COURSE TOPICS INCLUDE:**

1. Equation Derivation
2. Newton's Laws of Motion
3. Airborne Scenarios
4. Human Factors
5. Time & Distance
6. Conservation of Linear Momentum
7. Vector Diagramming
8. Articulated Vehicles (heavy truck & motorcycle)
9. Conservation of Energy, Crush & Energy Analysis
10. Skid Testing
11. Case Studies

**Supplies students need to bring:**

1. Note-taking material, 3-ring binder to hold notes & handouts
2. Graphing paper
3. Mechanical (drafting) pencil
4. Highlighter
5. Clipboard
6. Traffic template
7. Engineer's scale ruler
8. 360-degree protractor
9. Two 30-60-90 degree drafting triangles
10. Scientific calculator with trig functions
11. 25', 100', 300' measuring tapes
12. Camera (optional)

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*Although not required, students are highly encouraged to have or bring a TI-83, 84, 89 or Voyage 200 graphing calculator to class. Please also bring your own or departmental laptop.*

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**COURSE: Collision Reconstruction**

**LOCATION:** Spokane County Sheriff's Office Training Center  
6011 N Chase Rd  
Newman Lake, WA 99025

**DATE:** June 5 – June 23, 2017

**TIME:** 0800 – 1700 (weekdays with 1 hour lunch)



**COST:** \*None (lodging/per diem expenses are student/agency responsibility)

**\*REQUIRED STUDENT MANUAL:** Students/Agencies will need to pre-purchase (\$85) and show up on the first day of class with the following book:

*Fundamentals of Traffic Crash Reconstruction, Volume 2 of the Traffic Crash Reconstruction Series, by John Daily, Nathan Shigemura, and Jeremy Daily*

This book can be purchased through IPTM's website:

<https://store.ipm.org/collections/crash-investigation-publications/products/fundamentals-of-traffic-crash-reconstruction?variant=14724097542>

**REGISTER:** <https://www.spokanecounty.org/1492/Law-Enforcement-Training>

**PREREQUISITE:** Students who attend this class should have approx. 5 years-worth of experience investigating collisions. Students also need to have completed the Technical Collision Investigation course or its equivalent. Exceptions can be granted on a case-by-case basis with the lead instructor. CLASS SIZE: Maximum of 20 students

**COURSE INFORMATION:** Collision reconstruction is the effort to determine, from whatever information is available, how the collision occurred. Describing the events of the collision, in more or less detail, is the aim. This collision reconstruction course will provide the training necessary to reconstruct collisions through lecture and course material. The course also provides the required experience through real-world studies that the students must analyze. It will provide them the skill to find undetected facts in available information and the training that gives them the knowledge to deduce from these facts, the circumstances that will prove or disprove a theory of how a collision occurred.

All students will be given a free copy of an Excel Equation Calculator program. Both the TI and Excel programs will be used quite extensively during the course and allowed to be used on the final exam. All students will also be given a Recon data CD that has numerous reference and additional training materials included.

**Questions: Contact [SCSOTraining@spokanesherriff.org](mailto:SCSOTraining@spokanesherriff.org) or Call (509) 477-3211**