



# Colorado Springs Rocket Society

BEGINNER CLASSES: The Basics of Model Rocketry

CLASSES START IN OCTOBER 2017

20 Students Maximum



Also Open to School Teachers, Youth Group Leaders and Mentors (10 maximum, must register)

The Colorado Springs Rocket Society (COSROCS) is gearing up for the 2017-2018 Beginner and Advanced Model Rocketry Classes. COSROCS is an all volunteer, non-profit, community educational and service provider organization.

**Questions: Contact Les & Deanna Mann**

OPEN ENROLLMENT STARTS: **September 1<sup>st</sup>, 2017** at **L\_D4HRocketry@q.com**

ENROLLMENT ENDS: **October 28<sup>th</sup>, 2017**. Class space is limited, so register early!

CLASS LOCATION: **Fire Station #20**. Address: 6755 Rangewood Dr., COS 80918  
(NE corner of Rangewood Drive and Dublin Blvd.)

ROCKETRY CLASSES: Eight Classes Total—

*Class 1—Choose to attend one of two dates in October: Saturday 14<sup>th</sup> or Saturday 21<sup>st</sup>*

*Classes 2-8—1<sup>st</sup> Saturdays of every month: Starts November 4<sup>th</sup>, Ends May 5, 2018*

*All Classes Meet—1:00-4:00 p.m. (3 Hours Total: ~1 ½ hrs lesson, ~1 ½ hrs build)*

*Weather Makeup Days—The Sunday immediately following the original scheduled date.*

CLASS DESCRIPTION: The COSROCS Beginner Model Rocketry Class is designed for students with limited to no experience in model rocketry. *Teachers and youth mentors from other organizations are encouraged to participate.* In addition to the topics listed, students will learn basic construction skills building low- to mid-power, balsa-fin model rockets (Skill Levels 1-3) based on the students' abilities.

BEGINNER CLASS LESSON TOPICS:

- Class #1—Oct. 14<sup>th</sup> or 21<sup>st</sup>, 2017: Intro to Model Rocketry, NAR Safety Codes, What's Needed
- Class #2—Nov. 4, 2017: Basic Model Rocket Components, Construction & Techniques
- Class #3—Dec. 2, 2017: Rocket History, Model Rocketry History, Newton's Three Laws of Motion
- Class #4—Jan. 6, 2018: Flight Stability, Center of Gravity, Center of Pressure
- Class #5—Feb. 3, 2018: Launch & Range Safety, Launch Techniques, Tracking
- Class #6—Mar. 3, 2018: Black Powder & Composite Rocket Motors, Rocket in Flight
- Class #7—Apr. 7, 2018: Recovery Systems, How to Make a Simple Parachute and Streamer
- Class #8—May 5, 2018: Finishing Techniques (Painting Skills and Decal Applications)

CLASS REQUIREMENTS AND APPROXIMATE COSTS:

*Age Requirements—8-17 years of age. Youth under the age of 14 must have 1 parent or adult guardian attending each class.*

*Knowledge and Skill Assessment—Instructors will evaluate students' abilities during the October class to determine the skill level (SL) for their first rocket build.*

*COSROCS Class Fee—\$30 per student or \$35 per family.* Pays for material work samples and Class Lesson Binder.

*Rocket Kit Cost—SL-1 and SL-2 kits cost ~ \$5 to \$20 (per kit):* NOTE: COSROCS will provide a selection of kits for students to purchase at half the retail price or they may purchase their own.

*Rocket Motor Cost—~ \$10-\$12 a 3 pack* for 'A' to 'C' black powder motors.

*Build Supplies and Tools' Cost—~ \$10-\$50.* Students must provide their own build supplies and range box tools, any extra rocket kits, rocket motors, etc. NOTE: Do not purchase any chemicals, wood fillers or paints until after November's class.