



## Colorado Springs Rocket Society

### Beginner Classes: The Basics of Model Rocketry

CLASSES START OCTOBER 3, 2015

For Any Youth Ages 8-18 \*\* (15 Students Maximum) \*\* Enroll Now!



The Colorado Springs Rocket Society (COSROCS) are gearing up for their 2015-2016 Beginner Model Rocketry Classes. All that is needed now is youth interested in learning how to build super looking rockets that can fly straight and stable and return safely to fly again and again!

OPEN ENROLLMENT STARTS: **Immediately!**

ENROLLMENT ENDS: **September 30, 2015. Class space is limited, so enroll ASAP!**

CONTACT: **Les and Deanna Mann (COSROCS Members & Librarian) to register at:**  
**[L\\_D4HRocketry@q.com](mailto:L_D4HRocketry@q.com).**

CLASS SCHEDULE: **1<sup>st</sup> Saturdays of every month: Starting October 3, 2015 and ending May 7, 2016**  
**1:00-4:00 p.m.** (3 Hours Total: ~1 ½ hrs lesson, ~1 ½ hrs build)  
(Weather Makeup Days: Scheduled for the Sunday immediately following the 1<sup>st</sup> Saturday for the months of December-March)

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

CLASS DESCRIPTION: This class is designed for students with limited to no experience in model rocketry. Students will learn basic building skills building low-power, balsa-fin model rockets (Skill Levels 1-4) based on their abilities. Students will learn about the history of rocketry, the science and stability factors of a rocket, how black-powder motors work, proper flight preparations, range and launch safety, and the National Association of Rocketry (NAR) Safety Codes.

CLASS LESSON TOPICS (*Curriculum based off of the CSU Basic Model Rocketry 4-H Manual*):

- Class #1 – Introduction to Model Rocketry: NAR Model Rocketry Safety Codes, What's Needed, etc.
- Class #2 – Basic Model Rocket Components, Construction & Techniques
- Class #3 – Rocket History, Model Rocketry History, Newton's Three Laws of Motion
- Class #4 – Flight Stability, Center of Gravity, Center of Pressure
- Class #5 – Launch & Range Safety, Launch Techniques, Tracking
- Class #6 – Black Powder & Composite Rocket Motors, Rocket in Flight
- Class #7 – Recovery Systems, How to Make a Simple Parachute and Streamer
- Class #8 – Finishing Techniques (painting techniques and decals)

REQUIREMENTS AND APPROXIMATE COSTS:

1. Students must be between 8-18 years of age.
2. **1 parent or adult guardian must attend**, per family, for students under the age of 14.
3. Students' knowledge and skills with model rocketry will be assessed **during the October 3<sup>rd</sup> class**.
4. **Class Literature Cost is \$20:** Covers the cost of the class lessons and worksheets, class manual, and binder.
5. **Rocket Kit cost will range between \$5 to \$50 for most kits (Skill Levels 1-4).** *COSROCS will be providing numerous kits for students to purchase at half the retail price or less.*
6. **Build Supplies & Range Box Cost—approximately \$10-\$50:** Students must provide their own build and range box tools and supplies, extra rocket kits, rocket motors, etc. (**Do not purchase any supplies prior to November's class.**)

**REGISTER ASAP!** Go to [www.cosrocs.org](http://www.cosrocs.org) and click the link for the Class Registration Form. You have two options: 1) Complete the first page of the form and attach and send to the email address provided above or 2) send an email and provide some basic information of your interest along with your phone number(s). First come, first registered. You will be required to complete and sign the entire form during the first class you attend.