2020 BOCES Classes Available through RMC

* All single day classes are 7.5 to 8 hours of contact time unless otherwise noted.

Level I: Short-distance walks on maintained trails and/or indoor classroom sessions in accessible buildings ♦

Level II: Short-distance walks through the day on primarily level terrain ♦♦

Level III: Moderate hikes of less than five miles per day with elevation gain of less than 1,000 ft. ♦♦♦

Level IV: Hikes of more than five miles per day with elevation gain of more than 1,000 ft. ♦♦♦♦

Natural History Classes:

**Coyotes: Song Dogs of the West**
Jared Gricoskie     March 21     $80 per adult ages 16 and older
Coyotes are among this country’s most successful and resourceful predators. Often misunderstood and maligned, the coyote’s impact on our everyday life is profound. Explore the natural history of North America’s second largest canine, Native American stories, coyote discovery by Lewis and Clark, and the animal’s expansion to the East. Examine the coyote’s anatomy and biology; then, head into Rocky Mountain National Park to explore coyote habitat, social structure, and interactions. Learn how the coyote interacts with the ecosystem, its prey and humankind, and how wolves could impact coyotes in the future. ♦♦ (CSM credit available) Meets at the Rocky Mountain Conservancy Field Institute

**North with the Spring: Bird Migration**
Jeff Maugans     May 1     $80 per adult ages 16 and older
May in the high country is when we welcome back birds that have wintered in warmer climates. Ducks, shorebirds, warblers, swallows, flycatchers, sparrows, sapsuckers, bluebirds, and many others return for the nesting season or stop to refuel before heading farther north. Explore several locations in and around Estes Park and Rocky Mountain National Park to identify as many species as possible by sight and sound while learning about each bird’s unique natural history. ♦♦♦ (CSM credit available) Meets at the Rocky Mountain Conservancy Field Institute

**Tracking Wildlife in Rocky: Signs of Creatures Big & Small**
Jeff Connor     May 8     $80 per adult ages 16 and older
A story exists all around us as we walk through the woods. Animals use the same area we do, but often go unnoticed since much of their activity occurs off trails, at night, or early or late in the day. Do you know how to read the signs they leave behind? If not, this class is for you. Walking through the woods, along streams and in meadows we will look for animals and their signs, visit den sites used by bobcats, fox, coyote, and other animals and nests used by birds. From a distance, if the road is open to Rainbow Curve, we will look at the habitat black bears use to select their dens. Participants will be surprised by the abundance of sign left behind by our furred and feathered friends. The class will also provide a better understanding of community ecology and dynamics relative to hierarchical structure and trophic cascades. ♦♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

Fire in Ecosystems: Friend or Foe
Scott Franklin May 9 $80 per adult ages 16 and older
Both managers and citizens are grappling with the complexity of how climate change may alter fire disturbance regimes. Is fire still a natural disturbance in these mountain forests? What relationship does fire have with other disturbances such as drought and bark beetle outbreaks? During this all-day class, we will explore the role of fire in mountain forest ecosystems, typical fire regimes, synergistic disturbances, and predicted changes with climate warming. We will also discuss the history of fire policy ranging from the “10 am policy” to the “let burn policy”, including the caveat of the wildland-urban interface. ♦♦ (CSM credit available) Meets at the Rocky Mountain Conservancy Field Institute

Endangered Species of the Rockies: Evading Extinction
Gary C. Miller May 15 $80 per adult ages 16 and older
Concerned about threatened or endangered species, and their preservation as part of our natural world? How do species come to be at the brink of extinction, and how can they be recovered? The answers lie in the landmark Endangered Species Act of 1973 (ESA), the emerging science of conservation biology, and the resulting actions taken by scientists and citizens. Using examples of species occurring in Rocky Mountain National Park, this class will delve into these topics and their application in recovery efforts. The case histories (including little-known “backstories”) of efforts to recover peregrine falcons, Canada lynx, North American wolverine, and greenback cutthroat trout each demonstrate different aspects of endangered species management. The class includes a visit to a nesting area of the once-endangered/now-recovered peregrine falcon. ♦♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

There’s More to This Place than Meets the Eye: 100 Years of Environmental Change in RMNP
DeAnna Laurel May 22 $80 per adult ages 16 and older
This course provides an overview of the history of environmental change in the park with an emphasis on human-caused change. Discuss the history of mining, water engineering, recreational development and tourism, atmospheric inputs of dust and nitrates, wildlife management, and climate change in the context of protecting and restoring natural environments within the park. Understand how past human activities influence contemporary ecosystems and options for management of natural resources within the park. ♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

Owls of Rocky Mountain National Park
Jeff Maugans May 22 $80 per adult ages 16 and older
Participants will explore Rocky Mountain National Park in search of 3-4 species of owls during the spring courtship and nesting season. Students will be listening for the vocalizations of Northern Pygmy, Northern Saw-whet, Flammulated, and Great Horned Owls. The group will head into the field well before dark as Pygmy Owls are diurnal which provides a great opportunity to get great looks at this species. After dark participants will listen for the other species and hopefully locate a nesting pair or two while seeing first-hand the habitats these species require. ♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

The Surprising World of Lichens
Jennifer Frazer May 30 $80 per adult ages 16 and older
You cannot hike, bike, climb, or ski in Colorado without encountering lichens, but few people take the
time to notice or examine these ubiquitous organisms. Come take your blinders off and be blown away by
the biology and beauty of these fascinating communities of organisms that live where other life forms
cannot. In this class you’ll learn about the inhabitants, anatomy, growth forms, and reproductive
structures of lichens. You should invest in a 10X hand lens or loupe to maximize your enjoyment. Artists
and photographers welcome! ♦♦♦ (CSM credit available) Meets at the Field Institute

Birding RMNP by Ear
Nathan Pieplow     May 31     $80 per adult ages 16 and older
Birds are far more often heard than seen – but learning to identify them by ear can be a challenge. This
course will introduce the most common bird sounds of Rocky Mountain National Park. We will begin
with a field trip in the morning to several different habitats, to hear and practice identifying as many birds
as possible. In the afternoon, we will reconvene indoors for a class session to reinforce and extend the
learning from the morning. Both indoors and out, we will work on learning a standard vocabulary for
describing sounds, and visualizing sound using spectrograms, so that our eyes can help train our ears.
♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

NEW! Hunters of the Wind: Eagles, Hawks, & Falcons
W. Perry Conway     June 5     $80 per adult ages 16 and older
Eagles, hawks, and falcons are icons of power and speed that capture the human imagination. Rocky
Mountain National Park has all three of these aerial athletes. With an illustrated lecture/discussion in the
morning followed by an afternoon field trip, participants will learn how these beautiful birds are alike and
different with respect to their diet and nesting requirements, behavior, evolution, and population status.
Nesting areas will also be viewed from a safe distance and live birds will be presented as part of the
lecture/discussion. ♦♦ CSM credit available   Meets at the Rocky Mountain Conservancy Field Institute

Early Wildflowers of RMNP
Leanne Benton    June 6    $80 per adult ages 16 and older
Some of the park’s early blooms are the loveliest, from tiny alpine forget-me-nots to colorful Calypso
orchids. Search out these beauties with former Rocky Mountain National Park interpretive naturalist
Leanne Benton as we explore from high alpine ridges to lower montane meadows depending on what is
blooming. Participants will get up-close with the mountain flora to discover their adaptations for survival
and interesting stories behind their beautiful faces. Identification techniques will be honed, and
participants will gain confidence using a simple flower key. ♦♦ CSM credit available   Meets at the Rocky
Mountain Conservancy Field Institute

Rocky Mountain National Park Butterflies:  East of the Divide
Paul Opler & Evi Buckner-Opler     June 6  $80 per adult ages 16 and older
Butterflies are easily observed in every life zone of Rocky Mountain National Park. Learn basic butterfly biology,
behavior, and identification. In the field, visit several different habitats on the east slope of the park to search for
summer species, such as pale swallowtail, blues, several fritillaries, hoary comma, and Weidemeyer’s admiral.
Learn to identify these species, and also discuss their life histories and ecology, host-plant associations and
conservation concerns. Observation will rely on binoculars and digital photography; however, the primary instructor
will have a net-and-release permit to allow participants a close-up look at a variety of species. ♦♦ CSM credit
available. Meets at the Rocky Mountain Conservancy Field Institute

NEW!  Spring Mushrooms & Fungi of RMNP
Jon Sommer     June 7     $80 per adult ages 16 and older
Come learn the basics for identifying fleshy fungi (including mushrooms), their important role in the
ecosystem, and a brief overview of the fungal kingdom. Rocky Mountain National Park has some unique
and pristine ecosystems that we will explore, including the areas near snowbanks. We will spend a good
part of the day in the field, identifying mushrooms and other fungi, and gaining a first-hand appreciation
of these interesting and important organisms. There will be particular emphasis on the Cup Fungi (ascomycetes), including Morels and their allies. ♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

Untangling the Mystery of RMNP Native Orchids
Marlene Borneman  June 13  $80 per adult ages 16 and older
What is an Orchid? The orchid family (Orchidaceae) is the largest family of flowering plants, about 35,000 species. Surprisingly there are about 26 species native to Colorado with many growing in the montane and subalpine zones of RMNP. Our day includes learning the characteristics of the Orchid family, Orchid terminology, their symbiotic relationship to other plants, history of uses, and looking at specific Orchid species found in RMNP. We will see how many species we can find and identify in the field, while enjoying these elusive and mysterious plants. ♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

Wildflowers of RMNP
Leanne Benton  June 27-28  $160 per adult ages 16 and older for both days or $90 for each day
Explore the wonder and diversity of the park’s wildflowers with a former Rocky Mountain National Park interpretive naturalist. The park’s vertical topography allows for variety of habitats; this class will search out lush wildflower displays from montane meadows to high alpine ridges. Get up-close with the mountain flora to discover their adaptations for survival and interesting stories behind their beautiful faces. Hone identification techniques, and gain confidence using a flower key. Day 1: montane and subalpine wildflowers; Day 2: alpine wildflowers. ♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute
This class has over 16 hours of contact time for 1 credit.

Birding the Life Zones
Jeff Maugans  June 27-28  $160 per adult ages 16 and older
Rocky Mountain National Park is a birder’s paradise during the nesting season. This two-day class will explore the various ecosystems (life zones) of the park to find 50-70 bird species. We will identify hawks, falcons, eagles, ducks, white-tailed ptarmigans, brown-capped rosy-finches, swifts, broad-tailed hummingbirds, swallow, tanagers, sparrows, warblers, American dippers, wrens, woodpeckers, owls, nuthatches, chickadees, kinglets, jays, common ravens and other corvids, and a number of other members of the area’s avifauna. We will discuss the natural history of both the birds and the montane, subalpine, alpine, and riparian environments they inhabit. ♦♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute
This class has over 16 hours of contact time for 1 credit.

NEW! The Amazing Alpine Tundra: A Land of Extremes
Cynthia Langguth  July 10  $80 per adult ages 16 and older
“The combination of heavy snowfall, bitter wind, low temperatures, and mountainous topography in alpine areas creates the most severe climate in the world,” writes alpine researcher Joyce Gellhorn in her book Song of the Alpine. Yet among these extremes, a surprising diversity of life has found ways to survive and thrive. This course will explore the climate and topography that combine to shape this incredible ecosystem, and the amazing strategies alpine plants and animals use to make this their home. ♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute

North American Bears: Ecology, Behavior & Evolution
W. Perry Conway  July 11  $80 per adult ages 16 and older
Bears are the iconic symbol of the American wilderness. North America has three of the world’s eight species. Historically, the park had two of the three – now only one. Learn the natural history of all three North American species – their evolution, behavior, and habitat needs. With illustrated classroom sessions and field trips, you will learn which areas of the park provide proper black bear habitat, what they eat and their population status. In addition, instruction as to where to view and safely photograph North American
bears will be provided. ♦♦ CSM credit available  Meets at the Rocky Mountain Conservancy Field Institute

NEW! Rocky Mountain Riparian Plant Ecology, Identification, & Physiology
Isabel Schroeter     July 11     $80 per adult ages 16 and older
Riparian (streamside) ecosystems are hotspots for biodiversity and human recreational activities. In addition to these functions, riparian ecosystems provide a unique opportunity to better our scientific understanding about the intersection of plant ecology, hydrology, and ecological restoration. This interplay has become increasingly relevant to Rocky Mountain National Park due to management interests in restoring tall, dense willow-dominated plant communities following intense elk and moose browsing and beaver decline. This course will focus on teaching students about the identification of common riparian plants (e.g., willows, alders, birches, sedges) in addition to teaching students about physiological approaches used in the plant sciences to assess plant responses to environmental factors. The activities in this course will be contextualized in National Park Service riparian management and restoration efforts by showcasing these scientific approaches at multiple study sites of varying ecological condition. ♦♦♦ Meets at the Field Institute

Glaciers in Rocky
Dr. David Lindsey     July 18     $80 per adult ages 16 and older
During the ice ages, glaciers moved down the valleys of the Fall River and the Big Thompson. Glaciers carved U-shaped cross sections into formerly narrow stream valleys and left natural dams of glacial debris at their terminus. Striated and grooved bedrock, glacial erratics, and ridges of debris along valley walls are some of the other calling cards of ice. The ebb and flow of glacial advance is controlled by astronomical phenomena: the eccentricity of the earth’s orbit, the tilt of the earth’s axis of rotation, and the precession of the equinoxes. These move in cycles that combine to produce glacial maxima about every 100,00 years. The last glacial maximum was about 21,000 years ago. Since that time, the earth has warmed, not steadily, but in fits and starts that reflect other complex but poorly understood processes. Today all of these natural processes are further affected by man’s activities. The class will examine classical glacial features in the Fall River and Big Thompson valleys and discuss the processes that formed them. ♦♦ CSM credit available  Meets at the Rocky Mountain Conservancy Field Institute

Bats of Colorado & RMNP
Jeremy Siemers     July 24    $80 per adult ages 16 and older
Colorado is home to 19 bat species, and 8 are found in the vicinity of Rocky Mountain National Park. The evolution, ecology, behavior, anatomy, threats, and population status of Colorado’s bats will be discussed. Examples of survey equipment, video, and acoustic materials will be used to reinforce the lecture’s content. After dinner, we will travel to nearby foraging habitat to observe and listen to bat activity. We will drive as close as possible to the field sites, but participants should come prepared for short hikes. ♦♦ CSM credit available  Meets at the Rocky Mountain Conservancy Field Institute

Bighorn Sheep: Ecology & Management
Jeff Connor     July 25     $80 per adult ages 16 and older
The bighorn sheep is the rightful symbol of Rocky Mountain National Park and the state of Colorado. It is one of the most highly esteemed mammals in North America, representing the majestic mountains of the park. There are few people, who are not impressed by the sight of a large bighorn ram bearing its crown of massive horns. Spend a day with naturalist Jeff Connor learning about the ecology, population dynamics, behavior, food habitats, and mortality causes of bighorn sheep. Learn how to identify a ram from a ewe, a yearling from a lamb, and how to age rams by rings on their horns. Participants will discuss the importance of escape terrain and where ewes have their lambs. The class will also visit two mineral licks, learning why they are so important to the survival of sheep and Jeff will discuss important park management issues related to bighorn sheep. ♦♦♦ CSM credit available
Meets at the Rocky Mountain Conservancy Field Institute

NEW! Grasses of RMNP
**Denise Culver**  
**July 25-26**  
$160 per adult ages 16 and older

Grass identification is difficult even for the professional botanist! Why even bother?! The grass family is the third largest family in the world, species occupy every continent, and grasses are one of the most important aspects in all of human civilization! The class will focus on the characteristics for each tribe (grass family is so big, it is divided into tribes) common in Rocky Mountain National Park. There will be a classroom component, but majority of the class will be outside. ♦♦ Meets at the Field Institute

*This class has over 16 hours of contact time for 1 credit.*

**NEW! Wetland Plants of RMNP**

**Denise Culver**  
**August 1**  
$80 per adult ages 16 and older

If terms like catkins or perigynia intimidate yet intrigue you—come join us to explore the common wetland plants of Rocky Mountain National Park. The class will focus on the characteristics for common wetland plant families in Rocky Mountain National Park. There will be a classroom component, but majority of the class will be outside. ♦♦ Meets at the Field Institute

**The Persevering Pika: Secrets of Alpine Survival**

**Chris Ray**  
**August 1**  
$80 per adult ages 16 and older

Watch the American pika demonstrate its alpine survival strategy. Pikas and their hibernating neighbors—yellow-bellied marmots, chipmunks and squirrels—are easy to watch in the summer and fall as they forage among the alpine wildflowers. Learn to spot different animal behaviors that provide clues to surviving the long, cold winter. Pikas don’t hibernate, so you’re sure to learn a few survival tips from these resourceful little beasts. ♦♦ CSM credit available

Meets at the Rocky Mountain Conservancy Field Institute

**Grand Lake Area Class**

**Wild Mushrooms & Fungi of RMNP**

**Jon Sommer**  
**August 8**  
$80 per adult ages 16 and older

Often thought of as something to be avoided, fungi (including mushrooms) represent a vast and diverse group of organisms that play a critical role in virtually every terrestrial environment on the planet. Formerly thought of as plants, it is now known that fungi represent their own kingdom, along with plants and animals. Exemplified by prevalent and often colorful mushrooms, Rocky Mountain National Park has a bountiful and diverse fungal flora. Come learn the basics of mushroom identification, their important role in the ecosystem and a brief overview of the fungal kingdom. We will spend a good part of the day in the field, identifying mushrooms and other fungi, and gaining a first-hand appreciation of these interesting and important organisms. ♦♦ (CSM credit available) Meets at Trail River Ranch

**Grand Lake Area Class**

**The History of Moose in RMNP**

**Jeff Connor**  
**August 15**  
$80 per adult ages 16 and older

Before 1978, few if any moose called Rocky Mountain National Park home. In this class, we will discuss the debate around the history of moose in Colorado, as well as where their present population came from. In addition, we'll learn about what they eat, their seasonal behavior, moose management, why some are wearing radio collars, and their impact on the delicate willow communities of the Kawuneeche Valley, as well as their surprising relationships to other organisms in the area. We might even see some moose in the wild! ♦♦♦ CSM credit available Meets at Trail River Ranch

**NEW! Edible & Medicinal Plants of RMNP**

**Leanne Benton**  
**August 15**  
$80 per adult ages 16 and older

Spend the day exploring the flora of the park with a retired RMNP interpretive ranger. Not only are the plants diverse and beautiful, many have served as the grocery store and pharmacy for earlier people and are still used today. We will focus on these edible and medicinal species with discussions on plant identification, current and historic usage as food and medicine, preparation techniques, using plants safely, and ethical harvesting and conservation, plus some toxic species to avoid. ♦♦ CSM credit available

Meets at the Field Institute
Mountain Lion: RMNP’s Top Predator
Caroline Krumm & Dr. Don Hunter   August 22-23   $160 per adult ages 16 and older
Explore mountain lion ecology, ongoing research, human-mountain lion interaction, and community stewardship of wildlife resources during morning lectures followed by hands-on instruction in the field. Demonstrations of research methods, tools, and data collection will be included with practical instruction on how to “read” the signs left by mountain lions. Mountain lion safety, current research techniques, key management issues, and how communities across the West are becoming involved also will be discussed.
♦♦♦ CSM credit available Meets at the Rocky Mountain Conservancy Field Institute
This class has over 16 hours of contact time for 1 credit.

Grand Lake Area Class
Rocky Mountain National Park Butterflies: West of the Divide
Paul Opler & Evi Buckner-Opler   September 4   $80 per adult ages 16 and older
Butterflies are easily observed insects which fly in every life zone of Rocky Mountain National Park. This class will begin with an indoor introduction to basic butterfly biology, butterfly behavior, and butterfly diversity. In the field, we will visit several different habitats on the west side of the Park to search for late summer species, such as Rocky Mountain Parnassian, Scudder’s sulphur, silver-bordered fritillary, mourning cloak and dark wood-nymph. We will learn to ID these species and also discuss their life histories, ecology, host-plant associations and conservation concerns, including the impact of loss of lodgepole pine stands to bark beetles. The class will focus on butterfly observation through binoculars and digital photography; however, the primary instructor will have a net-and-release permit to allow participants a close-up look at a variety of species. ♦♦ CSM credit available. Meets at Trail River Ranch.

Cultural Classes:

Estes Valley: History & Historic Sites
Curt Buchholtz   May 29; June 12   $80 per adult ages 16 and older
This course will provide an overview of the region’s past by mixing brief lecture-and-discussion format with visits to historical sites of significance. Site visits will range from an ancient Indian battlefield to early homesteads, from stately resorts to deserted cabins. The course will examine numerous historical sites in the Estes Valley to discover the outlines of settlement and change. This class is intended to be more than just an historical tour. ♦♦ Meets at the Rocky Mountain Conservancy Field Institute

NEW! Boundaries, Borders, & Terrains: An Indigenous Telling of the Rockies
Doreen Martinez   June 13   $80 per adult ages 16 and older
Utilizing collective principles, natural reason and historicizing practices, this course brings understandings of Indigenous knowledge, engagements and values of land, landscapes and histories into a Native American framework and ethic. ♦♦ Meets at the Rocky Mountain Conservancy Field Institute

Phantoms: The Hidden History of RMNP
Mary Taylor Young   August 8-9   $160 per adult ages 16 and older
What stories hover like phantoms behind the contemporary face of Rocky Mountain National Park? Roam the park with award-winning writer Mary Taylor Young, author of the park’s centennial history *Rocky Mountain National Park: The First 100 Years*. Discover traces of park history that lie hidden beneath the surface and off the beaten path, places and events that are generally not interpreted by the park but are apparent when you know where to look. See billion-year-old rocks, and discover Apache Fort, site of an early Indian battle. Visit the location of the 1915 RMNP Dedication Ceremony. Discover the “phantom” Big Thompson entrance station, a main park entry that was obliterated in the 1960s and Phantom Valley Ranch, an early homestead turned guest ranch tucked along the Colorado River. Explore the site of the park’s ski area. Check out a 1930s CCC camp. Witness the changes floods in two different centuries have
left on the park. Wander inside an elk exclosure and see 21st century wildlife management in action. ♦♦♦

CSM credit available    Meets at the Rocky Mountain Conservancy Field Institute

NEW! Anna Wolfrom Dove & the Wigwam Tea Room
Nina Kunze     August 16   $80 per adult ages 16 and older
Anna Wolfrom Dove was a single woman homesteader who earned the claim to her land in 1914. Anna operated a successful tea room named the Wigwam on her homestead and in its heyday, the tea room attracted up to 200 visitors a day. The buildings still stand in what is now Rocky Mountain National Park. We will learn about Anna’s remarkable life while we visit the site of her tea room, and will also discuss the other single woman homesteaders in the Estes Park area: Ida McCreery, Esther Burnell, Katherine Garetson, and Amanda Blocker Byrd. ♦♦♦ (CSM credit available) Meets at the Field Institute

Photography, Art, & Writing Classes:

Beginning Watercolor for the Nature Enthusiast
Karen Ramsay     April 25   $80 per adult ages 16 and older
Start your watercolor journey through learning the fundamentals of the watercolor medium and an exciting way of applying paint in a fresh and vibrant way. The day will be spent learning varied techniques, setting up a palette of colors, and the importance of shapes and values. This information will be the jump-start you need to become a watercolor artist, both indoors and out in nature! ♦ Meets at the Rocky Mountain Conservancy Field Institute

NEW! Photographing Spring Wildlife in Rocky Mountain National Park
Dawn Wilson     June 11-12  $250 per adult ages 16 and older
Spring is a wonderful time of year in Rocky Mountain National Park! The wildflowers fill the meadows, the peaks are still capped with snow, the temperatures are getting warmer, and the animals have given birth to their babies. Elk and moose calves are running around the meadows, pikas and marmots can be seen along Trail Ridge Road again, and birds are beginning to raise their chicks. We will head out each morning to a beautiful location to find wildlife in the golden light of early morning and then spend the day photographing a variety of animals on the east and west sides of the park and in Estes Park. While in the field, we will discuss techniques for producing dynamic photos of wildlife, tips for safely being around wild animals, and ethics for photographing wildlife. Ideal for all levels of photographers. This class has over 16 hours of contact time for 1 credit.

NEW! Grand Lake Area Class
Colors & Their Values: Painting for All Levels
Donna Lyons     June 20    $80 per adult ages 16 and older
Value is the lightness and darkness of color and is the most important consideration in your composition. In this one-day class we will briefly renew our understanding of the color wheel and color relationships. Correct value placement in landscape painting will be discussed as well as the four properties of color: hue, intensity, temperature, value and how both color and value work together to construct a painting. Through the use of “color-finders” and “value-finders” we will be able to interpret the landscape through the lightness and darkness of the colors we see to construct a good composition. In addition to demonstrations, we will create a small color-chart for our use when we paint one or two pieces that demonstrate our understanding of how we can control our color through values, rather than having our color use control us. Traditional painting methods stressed the application of tones and establishing value patterns on the paper or canvas before applying color. Perhaps a more exciting way to start is to compose in color from the beginning. ♦♦ Meets at Trail River Ranch

NEW! Smartphone Photography: Learning the Basics
Field Peterson     June 20   $80 per adult ages 16 and older
Do you love to travel, but aren’t sure how to capture the beauty with your phone or camera? In this highly interactive and fun two-day course, you will learn how to work your phone and digital camera. Elevate your photography game by mastering your equipment, exposure, and composition in a hands-on workshop. Get creative, share ideas, and work together to explore the wonderful realm of photography.

Meets at the Field Institute

Sketchbook Journaling: Wilderness, Wildlife & Wonder in Watercolor
Karen Ramsay     June 25-26     $160 per adult ages 16 and older
Toss your sketchbook and some simple tools into your daypack and explore Rocky Mountain National Park! Through guided exercises and free exploration, create a record of personal, authentic interaction. Learn (or sharpen) some basic sketching and observation skills; then go to various locations in the park to put these skills to work. Approaches will include simple sketching with pencil, ink, and colored pencil or watercolor. Guided activities for observing, sketching, and some (brief) writing will help participants discover the many ways they interact with their environments. (Beginners are welcome and encouraged.)

Meets at the Rocky Mountain Conservancy Field Institute
This class has over 16 hours of contact time for 1 credit.

NEW!  Discovering “NOTAN” in the Landscape: A Graphite & Pen Field Sketching Class
Marjorie Leggitt     July 16-17     $160 per adult ages 16 and older
Landscapes can be overwhelming - trees, shrubs, buildings, clouds - there is so much out there! Take a deep breath, it's not as hard as you think. NOTAN is the Japanese word meaning "dark/light". In this class, discover how to look at the landscape through new eyes by approaching the scene as a harmony and arrangement of light and dark shapes. Using simple tools, Marjorie guides you to go beyond direct imitation of what you see by simplifying "things" into tonal relationships. Like magic, shapes become forms and forms become landscapes. With basic tools - pencil and ball point pen - learn new sketching techniques and gain new artistic confidence as you fill your sketchbooks with enticing black and white scenes.

Meets at the Field Institute
This class has over 16 hours of contact time for 1 credit.

Grand Lake Area Class
NEW! Drawing for Painters
Donna Lyons     July 18-19     $160 per adult ages 16 and older
A strong drawing is the backbone of a good painting. Early summer is a great time to brush up on your drawing skills to make your paintings stronger and better. Practice your skills and try something new! Relationships of shapes, values and perspective in painting, which determine the strength or weakness of the composition in your work, will be discussed and explored. With plenty of practice time, you will become more confident in drawing and experimenting with edges, shapes, values, composition, and design. You will go home with eagerness to get started on that next painting. Students will work with a variety of formats and sizes of paper while working under the inspiration of the Kawuneeche Valley. Concerns about color are eliminated with this class, as all our work will be done with pencil, charcoal, ink-pen, markers, Lamp Black watercolor, and a brush.

Meets at Trail River Ranch
This class has over 16 hours of contact time for 1 credit.

Watercolor Brushstrokes: Painting the Landscapes of RMNP
Karen Ramsay     August 6-7     $160 per adult ages 16 and older
Learn the techniques to capture the park’s landscapes in watercolor. Open your eyes to the surrounding beauty, and learn ways to paint skies, mountains, water, trees, and much more. Basic drawing skills and familiarity with watercolor skills are required. This class will consist of part classroom and part field location.

Meets at the Rocky Mountain Conservancy Field Institute
This class has over 16 hours of contact time for 1 credit.

NEW!  Wildflower Photography: Panorama to Close-up
Bob Dean     August 7-9     $300 per adult ages 16 and older
This course will help you learn to make images of wildflowers you’ll be proud to share. Participants will learn to use the creative controls on a camera to capture beautiful images of flowers from panoramic views to close up details. Delve into the software tools for focus stacking (allowing nearly unlimited depth of field) and discover the amazing world of wildflower photography. Part of getting great images is using the best natural light. Participants will do field work at the beginning and end of the day, saving the classroom work for evenings and mid-day. Since Colorado’s summer weather can include rainy afternoons and evenings, there will be an option to do studio work. Meets at the Rocky Mountain Conservancy Field Institute

This class has over 16 hours of contact time for 1 credit.

Night Sky Landscape Photography
Stan Honda  August 21-23  $300 per adult ages 16 and older
Don’t put your camera away after the sun sets! There’s a whole different park to photograph when the stars come out, and you don’t need a telescope. Learn various techniques and camera settings useful to photograph the Milky Way, the moon, the stars, and other objects in the night sky using digital cameras and standard lenses. We’ll discuss how to plan shots using star charts, software, and apps to determine what will be seen in the night sky. (This course is best for intermediate level and above.)

Meets at the Rocky Mountain Conservancy Field Institute

This class has over 16 hours of contact time for 1 credit.

NEW! Landscape Photography Workshop: Shooting & Creating Beautiful Landscape Images
Michael Allen  August 28-30  $300 per adult ages 16 and older
This workshop is an introduction and study (for photographers of all experience levels) in capturing and creating landscape images. The workshop will include a discussion of how to find and coalesce all the elements needed to create a dynamic landscape photograph. We will discuss composition/camera position as well as post-processing workflows to optimize the color, details and mood to take your photographs to the next level. We will also go over gear, camera settings, color and many of the technical aspects that you need to understand to capture high-quality images. We will also cover the pros and cons of using filters and explore modern approaches to traditional landscape photography. The course will also include field shooting sessions in Rocky Mountain National Park, and classroom instruction to study and discuss concepts.

Meets at the Rocky Mountain Conservancy Field Institute

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NEW! Sketching with Colored Pencil & Watercolor
Suzie Garner  September 12-13  $160 per adult ages 16 and older
Field sketching with colored pencil and watercolor in a sketchbook. Learn basics of colored pencils and watercolor and how to use them together in a field sketchbook. Demonstrations will include techniques for the application of color with both mediums; layering and mark-making. Sketching and drawing tips for sketching outdoors will be included. Participants will leave with a better understanding of colored pencil and watercolor and how to use them in the field.

Meets at the Rocky Mountain Conservancy Field Institute

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