



Course Equipment

Cycle the Rockies: Energy and Climate Change in Montana

The following detailed equipment and food-planning lists are intended to help you pack for the upcoming Cycle the Rockies course. It is important that you bring needed clothing, gear & food, yet do not bring too much, as you will be carrying everything on your bicycle. We'll have opportunities to wash clothes along the way and buy more toiletries, etc. You may store duffle bags and any unneeded items at the WRFI office during the course.

WRFI supports smart shopping and saving money. We do not expect you to spend any more than necessary. For example, a \$.50 thrift store food bowl works just as good as a \$50 titanium one. Some of your gear may be purchased at discount or used, but it all should be high quality. **See below for information on WRFI bike and pannier rentals.**

Much of this equipment can last you a lifetime of outdoor adventure. If unsure about which item to buy consider what will be most useful to you after the course, and consult WRFI staff. Where to shop? Buying from local shops often gets you the best service and advice, and supports your community. Some larger chain stores have greater selection and excellent return policies - even for heavily used gear. Craigslist gives you access to a world of cheap used gear - but don't let a good deal lead you into buying something that is worn out or does not fit well! Please bring a copy of this document with you as you pack or shop for gear. It is essential to your safety and comfort that you are well-equipped and supplied. Call or email your instructors if you have any questions!

Required Equipment

- Bike helmet: approved by ANSI, fits well, no cracks.
- Personal bike lock. Light is right!
- Sleeping bag/down quilt: rated to at least +25°: down or synthetic is fine.
- Sleeping pad: inflatable Thermarest, or closed cell foam.
- Headlamp & batteries
- Two water bottles
- Plastic bowl, eating utensils: A secure lid allows saving leftovers.
- Sunglasses with UV protection
- Multi-tool with knife, or Swiss army knife
- Pens/pencils and notebook
- Zip-lock bags: large enough for notes/journals
- Toiletries: **Travel size** tooth paste, shampoo, lotion, sunscreen and lip balm, earplugs for night noises.
- Small, light day pack, hip pack, or just a strap to carry a pannier. This will be useful on our off-bike site visits and for grocery shopping. This bag can also be used to organize your gear inside your panniers or trailer.

Optional Equipment

- Binoculars & camera
- Tablet / Kindle for downloading the readings

- Crazy Creek-type chairs are highly recommended for class and camping. Chair “kits” that incorporate sleeping pads are lighter and more compact than separate chairs.

Clothing List

- 2 pair bike shorts
- 1 pair of quick-drying shorts
- 1 pair of quick-drying pants
- 2 pair of non-cotton biking socks
- 1 pair warm wool/synthetic socks
- 2 synthetic or light wool cycling shirts: jerseys are great
- 1 town shirt: a nice shirt for meetings
- 1 set long underwear (top and bottom): synthetic or wool work great, running/cycling tights work well as bottoms, and can be worn while cycling on cold days.
- Rain jacket & pants: **waterproof** and brightly colored for traffic visibility
- Fleece or wool jacket/sweater
- Bike shoes that work with your pedals. Bike specific shoes are great if you have clipless pedals, running/athletic shoes are great if you have flat pedals or toe clips
- Warm hat
- Mittens/gloves (polypro, fleece, or wool)
- Bandana
- Camp sandals, sneakers, Crocs or flip-flops
- Sun/baseball hat
- Bike gloves
- Lightweight camp towel and swim apparel

Equipment that WRFI will Supply

- First aid kit
- Water purification supplies
- Cooking stoves and fuel
- Cook gear and utensils
- Dinner food
- Tents (2-3 people per tent)
- Maps
- Group bike repair kit
- Bike locks
- WRFI travel mug for each student

Camping and Sleeping

We will be camping outdoors for the entire course. Tent groups will consist of 2-3 people.

Water

Clean water is available throughout the course. The course instructors will have a water filter or chlorine tablets in case we need to treat water from a stream.

Bicycle

You will need to bring or rent a bicycle capable of touring on pavement and dirt roads. Any bike with a triple crankset is ideal for this course, including: dedicated touring bikes, mountain bikes, cyclocross, road, and recumbent bikes. Many newer bikes with a double crankset have a similar gear range to older bikes with a triple crankset. If you are unsure if your bike will be appropriate, please consult us!



Please note that many road bikes are not well-suited for touring. They are light weight (and so don't carry weight well), have smaller tires and little room for larger tires (so flats are much more likely), and are geared for high speed, not loaded-bike hill climbs. Cyclocross and dedicated touring bikes are great, but a converted mountain bike can be a good bet for an economical, durable bike.

The Adventure Cycling website has more information about choosing a bike for a tour:

<http://www.adventurecycling.org/adventure-cyclist/online-features/touring-bike-buyers-guide/>



*Triple Crankset – note the three toothy rings!
Double cranks sometimes don't cut it.*



A great-looking touring tire – note the deep tread and smooth center section.

Tires: We ride on some gravel roads along the way, so your tires should be sturdy enough for that use. Road bike tires must be **700x30** or larger. Mountain bike tires should be no larger than **26x1.5** and have light tread for efficiency on the road. If you show up with inadequate tires you will have to buy new ones.

Racks and panniers (front AND rear), or a trailer and bags with enough capacity for unsupported touring. It is important that you are able to carry all of your gear, as well as your portion of the group gear. Bungees or straps are also helpful for attaching large bulky items to your rack (like tents). Plan on allocating about $\frac{1}{4}$ of your carrying capacity for group gear.

Pedals: Either clipless or platform pedals with toe clips are appropriate for this course. Practice with your pedals / toeclips before the course! Your shoes should have a rubber sole with good traction for walking—**NO** smooth-soled road racing shoes.

Sizing: Be sure your bike is appropriately sized and well-adjusted for your body. A bike shop can help with fitting the bike. **You should ride at least one hundred total miles on your bike before the course begins.** Please contact the course instructors to discuss your bike and gear preparations.

Bike Check

You must ensure that your bike is in mechanically sound prior to the course. Take your bike to a professional bike mechanic to ensure that these components are in excellent working order. If your bike is not in good condition at course start you will not be allowed to ride. **Bring this list to the shop and have them complete the check, and bring this signed sheet to course start.**

- Frame integrity and alignment
- Tires and wheels (check tire wear, spoke tension, wheels must be true, round, and dished)
- Brake mechanisms, cables, and pads
- All cables (strong and adjusted)
- Chain, chainrings, cassette cogs (tooth wear and chain stretch)
- Derailleurs, shifters (wear, alignment, cables, adjustment)
- Bearings (headset, bottom bracket, pedals, hubs)
- Racks, rack bolts or trailer attachments (secured; use blue loc-tite on rack bolts)

Mechanic's signature: _____ Date: _____

Bike Tools/Parts you must bring: (Go to a good local bike shop with this list)

- Two water bottles and cages (or a large water bladder)
- Tire levers/patch kit
- 2 Spare tubes
- 3 spare spokes properly sized for your wheels (2 for drive-side of rear wheel)
- Allen wrenches 4, 5, 6mm, or bike multi tool
- 2 brake pads
- One brake cable and one derailleur cable
- Extra cleat bolts for clipless pedals
- Chain lube
- Flashing red taillight
- Headlight, or a headlamp that fits on your helmet
- Duct tape
- Racks and panniers (front AND rear), or a trailer and bags with enough capacity for unsupported touring.
- Optional: Rearview mirror
- Optional: Handlebar bag – allows quick access to road essentials

Check the Adventure Cycling website for more information about packing for cycling trips:

<http://www.adv-cycling.org/features/packing.cfm>

WRFI Bike & Pannier Rental Program

In 2017, WRFI partnered with TREK and a family foundation to offer students the option of renting a bike and/or panniers for the Cycle the Rockies course. If you're new to bike touring or aren't quite ready to invest in a high quality touring equipment, a WRFI rental can be a good option. We have six bikes of varying sizes and six sets of panniers that are available on a first come, first served basis.

Please contact the office as soon as possible to reserve your rentals and get the correct sizes.

For \$150 you can rent a bike for the entire Cycle the Rockies course. Bike rentals include:

- TREK 520 Bike
- Krypto Flex Bike Lock
- Bontrager Ion 350 RT Bicycle Light
- Bontrager Flare R Tail Light
- Planet Bike "Lunch Box"

For \$50 students can also rent a set of Ortlieb Panniers (front and back) for the duration of the course. *You do not have to rent a bike to rent a set of panniers.*

Food Planning

Food will be our fuel for the course. Nutritious and tasty meals will improve our enjoyment, learning and health. Breakfast, lunch, and snacks are individually provided and prepared meals, dinner is a group meal. There will be opportunities to eat in restaurants, but WRFI will always provide the option of eating a group dinner. WRFI dinners use vegetarian, local & organic ingredients as much as possible. We pride ourselves on cooking healthful, tasty dinners. These meals usually include a variety of beans, cheeses, grains, pastas, sauces, spices, and vegetables.

We plan dinner menus for all known food allergies (be sure to tell us about any allergies), but we cannot satisfy everyone's specific food preferences. WRFI dinners are vegetarian. Vegans will have non-dairy options. Our dinners provide a good balance of fats, carbohydrates and protein to support vigorous exercise and learning.

You must arrive to course start with three days of breakfast, lunch, and snacks. Our first days are busy and there will not be time for food shopping.

BREAKFAST

Students will provide their own breakfast foods during the course. There will be stoves available to heat water and to cook other foods. We suggest foods that will provide you with lasting energy - not just a quick carbohydrate rush followed by a low-sugar lull. Meals that are quick to prepare are best, since stove time is limited in a large group. Successful breakfasts have included:

- Oatmeal fortified with nuts, fruit, butter and milk.
- Peanut butter, Nutella, cream cheese, or fruit on toast or bagels.
- Granola or cereal with nuts and powdered milk.
- Hot cocoa, tea, coffee, fruit juices, vitamin-packed energy drinks.

LUNCH

Students will provide their own lunch food on the course. We will not normally use the stoves during lunch, so ready-to-eat foods are best. Keep some quick snacks available for rest stops along the way. Successful lunches have included:

- Breads (tortillas, bagels, pitas, crackers, etc.)
- Cheeses
- Salami, sausage, jerky, tuna, or other durable meats
- Durable vegetables (cabbage, carrots, etc)
- Peanut butter, jelly, nutella, etc
- Trail mix
- Chocolate (of course!)
- Fruit (fresh or dried)
- Dinner leftovers
- Energy bars and drinks
- Hummus

SHOPPING

We will be passing through towns most days on the road, and you will be able to buy food along the way. If you are especially fond of certain foods or supplements you should consider bringing a larger supply of those - remembering that you will be carrying that weight on your bike for about 700 miles.

Cash machines are fairly common along our route, but not all of them work with any given cash card. Note that NOT all stores in small towns accept credit cards... so if you want that ice cream bar or soda at the random little store in the middle of nowhere, make sure you have some dollar bills.

Bring adequate cash and/or credit cards to buy the food you need. WRFI cannot lend you cash.