



# Monmouth College on Rails

## A new approach to off-campus study

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### The Plan

While the Monmouth College Biology Department's traditional approach to short off-campus study trips has been to meet with students once a week for half a semester in order to prepare them for a particular trip (i.e. during Spring Break), very little formal instruction has typically taken place during the actual travel portion of the trip. We seek to develop a new model in which train travel is utilized for large portions of a trip, during which time a semester's worth of lecture/discussion is presented on a specific topic. This model not only has the advantages of increased face-time with our students the trip itself, it also provides an opportunity to compare the environmental impact of different forms of travel. Our departure from nearby Galesburg, IL, also has a number of historical implications of note as well. Galesburg not only contains the second largest rail yard on the BNSF system, it has also been selected as the site for the future National Railroad Hall of Fame Museum. The course which will be offered on the inaugural trip of Monmouth College on Rails in August, 2010 will be "Environmental Microbiology: the Extremophiles". This course will introduce various harsh environments where microbial life is found and then proceed to visit these environments to acquire soil and water samples which can be returned to campus and analyzed in the conventional microbiology course which will immediately follow this trip during the Fall 2010 semester.

### The Itinerary

- 8-Aug (Sat) Leave Galesburg on 4:38 pm California Zephyr (Class Intro + Halophiles; Forward, Chaps 1, 17-19).
- 9-Aug (Mon) Aboard the Zephyr (Thermophiles; Chaps 2-8).
- 10-Aug (Tue) Rent van from SLC Airport. See Great Salt Lake at Antelope Island SP. Drive to Yellowstone National Park (6 hours). Camp at Yellowstone.
- 11-Aug (Wed) See Mammoth Hot Springs and nearby geysers. Camp at Yellowstone.
- 12-Aug (Thurs) See Old Faithful and nearby geysers. Drive to Salt Lake City (6 hours). Catch 11:30 pm California Zephyr.
- 13-Aug (Fri) Aboard the Zephyr (Alkaliphiles & Endobiology Chaps 23-24, 26, 28). Arrive in Emeryville at 5:10 pm. Rent van in an Emeryville. Camp at Kirby Cove, overlooking Golden Gate Bridge.
- 14-Aug (Sat) Drive to Frog Leap Winery (1 hour). Tour Frog Leap Winery in Napa Valley. Drive to Yosemite National Park (5 hours). Camp at Yosemite National Park.
- 15-Aug (Sun) See Mono Lake. Camp at Yosemite National Park.
- 16-Aug (Mon) See Yosemite Falls. Drive to San Francisco (4 hours). Camp at Kirby Cv.
- 17-Aug (Tues) 9:10 am Zephyr to Denver (Acidophiles & Biotechnology; Chaps 20-22, 27).
- 18-Aug (Wed) Aboard the Zephyr (Study for final). Arrive in Denver at 7:38 pm. Stay in Hotel of the Rockies.
- 19-Aug (Thurs) Rent van in Denver. Tour Arco Gold Mine and Arco Tunnel. Drive to Rocky Mountain National Park (3 hours). Camp at Rocky Mountain National Park.
- 20-Aug (Fri) Hiking in Rocky Mountain National Park. 7:38 pm Zephyr to Galesburg.
- 21-Aug (Sat) Comprehensive final exam aboard the Zephyr. Arrive in Galesburg 12:34 pm.



Nutrient Rich Environment-  
Napa Valley



High Temperature  
Environment- Hot  
Springs & Geysers



Alkaline Environment-  
Mono Lake



Acidic Environment-  
Gold Mine Drainage

### The Cost

While the budget works out at approximately \$900/person, Monmouth is able to offer this inaugural journey of Monmouth College on Rails to qualified students free of charge. This has been made possible through a generous gift from two of our trustees, David Byrnes and Karen Chalm, along with their families. Students will be selected based on their completion of the prerequisites for the course, and will be ranked according to their GPA's.

High Salt Environment-  
The Great Salt Lake



### The Future

Other long distant domestic routes of interest include riding the Southwest Chief to L.A. and back or the Empire Builder to Seattle. The latter could even be linked with Canada's VIA Rail in Vancouver for a return trip across southern Canada. In regards to international mass travel, why not a Semester on Rails that links the Island system, the Trans-Siberian railway, China Railways, and those in South East Asia to travel across all of Eurasia?