

FOOTPRINTS ON THE JAMES: THE NATURAL HISTORY OF THE JAMES RIVER WATERSHED

BIOL 391, Summer 2015

Instructors:

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Time/Location: May 18 - June 18, 2015. James River watershed.

Credits: 4

Websites: <http://www.footprintsonthejames.vcu.edu/>
<https://www.facebook.com/FootprintsontheJames>

COURSE OVERVIEW:

The James River watershed represents one of the largest geographical features in the Commonwealth of Virginia, and a crucial part of its history. This newly-developed class will travel down the river, exploring its past and present, with faculty from the Biology department on the Center for Environmental Studies. The four week journey will take place in canoes and kayaks, from the headwaters near Irongate to Jamestown. As a result of this class, we expect students to gain a great appreciation for the natural history and current condition of the river, its role in Virginia's development, and how our historic and present-day use impact its quality, flora, and fauna.

The principal goal for this class is to expose the students to the importance of the James River watershed to the residents of Virginia in the present, past and future. This collaborative, experiential learning opportunity will combine faculty from the Biology and History departments, the Center for Environmental Studies and the Outdoor Adventure Program. By immersing students in a natural landscape prominent in Virginia's history for a month, backpacking and canoeing through the watershed and down the river, this program represents a unique opportunity for students at VCU to learn about human history, natural history and how the two have shaped each other. The goals for each student will be to learn more about the specific features that make up this river system by identifying and stimulating individual ownership of particular issues of interest to each student before and during the class. In addition, students will learn and practice advanced camping, canoeing, kayaking, and outdoor living skills, including Leave No Trace camping. Students will also learn to function as team members, and will be instructed in expedition management, group dynamics, and leadership skills.

This class will be a collaborative field-based experience between units indicated above, taking place over four weeks in the summer of 2015. It will begin with a series of topical seminars and skill development classes at the VCU Rice Center for Environmental Studies on the James River in Charles City County, VA. The class will continue by moving down the lower section of the river, visiting sites of historical and environmental significance until we reach the colonial

capital of Jamestown, VA. The class will continue by driving to the headwaters of the James River near Irongate in the Blue Ridge mountains and proceeding by canoe, bateau and kayak through the watershed. During this journey the students will be engaged with a wide variety of hands-on interactions in the three disciplines, guided by faculty from each department and guest experts. The Outdoor Adventure Program will be providing trained students from their Student Outdoor Leader Program as program guides to teach a wide variety of practical outdoors skills and to introduce traditional expedition management and outdoor leadership techniques. The students will be camping in tents each night and managing their own daily affairs. Responsibility for daily activities such as group leadership, cooking, navigation, setting up camp and managing social media will be assigned as daily duties on rotation.

COURSE GOALS:

Students should be able to:

- identify the major features of a river system and its related watershed
- discuss the distinguishing features of the James River and its watershed
- identify, compare and discuss features of a biological system of interest in each of the three regions of the river (or equivalent independent project)
- recognize and understand many of the ways in which human habitation and development have impacted the James River, and vice versa
- understand and explain various connections between the river and the land which surrounds it
- learn, use and demonstrate proficiency in expedition skills, management, and logistics as it relates to this trip.

COURSE REQUIREMENTS

Honor Code: Giving or receiving unauthorized assistance on tests or any other graded activities, as well as plagiarism, are violations of the University's Honor Code and will result in failure and a referral to the Student Honor Court. Also, students who observe cheating or any violation of the Honor Code have a responsibility to follow the procedures detailed in the *Virginia Commonwealth University Student Handbook*.

Participants will be held to the VCU Student Code of Conduct at all times. This document and other relevant information can be found at the following link. Please pay particular attention to the section regarding conduct off campus.

Required Readings:

- Students will be given a coursepack with required readings, articles, etc.

ASSESSMENT:

Grades for all assignments will be on this scale: 90-100%=A, 80-89%=B, 70-79%=C, 60-69%=D, 0-59%=F

Tentative Breakdown of Grades:

Practical Exam	20%
Leading/participating in discussions	20%
Journal Entries	30%
End of course essays	20%
Participation	10%

This class will be assessed by a variety of traditional assessment techniques, including assigned papers, written examinations, and in-class presentations. In addition, we plan to have students to undertake individualized and specialized research, and then teach some content of their own. Each student will be expected to keep a journal of their observations and experiences during these exercises. Students will also be expected to keep a detailed and analytical personal journal of the class, to serve as an assessment tool as well as an outlet of student creative expression and self reflection.

Regular large group discussions (schedule to be added below)

Students will complete a practical exam of skills learned during the first week at the Rice center.

Over the course of the trip, students will keep a daily journal of activities and individual goals, progress and observations.

Students will receive a participation grade from their experience in periodic group discussions and daily group duties

Periodic media contributions: blog, Facebook, Spot updates, etc.

Participation: Students are expected to attend all group events and to be on time for group meetings and gatherings—this will be taken very seriously. Carry a phone/watch and plan ahead for events. Always know when and where our meetings will take place and how to get there.

Essays: At the beginning of the course, we will pass out 3 essay questions. While these questions are due after the course ends, students should include information from sites, our speakers, and our readings in each answer, so it is important to take thorough notes while on the trip to be able to adequately answer these questions afterwards. Each essay should be approximately 4 pages in length (for a total of 12 typed, double-spaced pages). Essays should be emailed to all of the course instructors no later than June 22.

Discussions: Students, in groups of 2-3, will lead two 1-hour discussions. In addition, students are expected to participate actively and thoughtfully in every group discussion. Students must come to each discussion with ALL of the readings completed. Discussions will cover all of the reading material assigned since the prior discussion. The instructors will lead the final discussion. Also, students should be prepared to discuss the sites we have visited and the people we have talked with since the previous discussion session.

Journal: There will be two types of journal entries for this course. The first will be a natural history observation journal. This will be Students are required to complete a minimum of 12

personal journal entries during the trip. Entries should be 1-2 full pages (front and back) in length. Students should write an entry every 2 days, and entries should analytically connect students' experiences at the sites, their interactions with speakers/activists, course readings, and the experience of traveling. Your journal entries should be written every couple of days. In other words, we don't want you to go a week without writing anything and then write daily during the last week of the course. It is important for your reflection and analysis to spread out the journal entries across the four weeks. Other than these guidelines, there are no assigned topics for these journal entries. Journals will be collected and checked periodically on the trip. You will turn in your journal at the end of the trip.

TRIP LIFE:

All participants will be living, travelling and learning in variety of camping locations in close proximity to the James River and its watershed. From the first night out, everyone will be living out of a backpacking tent and eating meals prepared by our classmates. After the first week, most of your nights will be spent in a different place from the evening before. While there will be a few opportunities for a night back in Richmond, we will spend ~28 days and nights in the field. Showers, grid electricity and refrigeration will be infrequent if not absent. The class will take place during the early summer in Virginia; students will have ample opportunity to consider mosquitos, heat, sunburn, ticks, chafing, and body odor. To accommodate this, the day to day operations of this trip will be largely the responsibility of the student participants. This will require both self discipline and cooperation among our members.

The living arrangements will be organized enough to maintain a smooth flow of work and life without being burdensome. To this end, you will all be dividing up the necessary group responsibilities, outlined below. These will include participating in educational opportunities, writing daily journal entries, taking pictures and possibly updating various social media outlets when appropriate. Student Trip Leaders will be responsible for making sure that everything that needs to happen does happen each day. Trip Leaders will make all final decisions, delegate authority, and define duties for the others when necessary.

TRIP INFORMATION:

Travel: The OAP vans and trailer will transport everyone and the equipment to and from our various destinations throughout the course. While in the backcountry, we will be traveling by human power either by foot, canoe, sea kayak, raft and batteau. The OAP staff will transport equipment to various transition points along the route.

Difficulty: This trip is designed for those with little experience to be able to fully participate in all aspects of the trip. Most of the trails that we will be walking are over gradual terrain and the whitewater on this trip is primarily class II waves. However, this is a long extended course that demands at least some physical fitness. Participants Must be able to participate in a minimum of 5 hours of activity for multiple consecutive days in a row. We have scheduled in a limited number of rest days throughout the trip.

Lodging/Camping: We will be camping every night of this course. During the first week of the course we will be basing out of VCU's Rice Center and camping on the grounds. When we move up river, we will be camping in remote backcountry locations for most of the trip.

Occasionally we will pass more developed areas (such as Scottsville) where we will camp in an established commercial campground. However, the norm will be either backcountry campsites while we are on the trail, or on islands in the middle of the James River while we are paddling.

Average Day: Plan on long days with lots of activities and discussions. The educational events will be determined opportunistically to make the best use of our time. Typically each day will begin around 6am. The group will have breakfast and be packed up and ready to go by 8am. Our goal is to start moving down stream between 9am and 10am each day. We will take a break around midday for lunch and activities. The group will then continue downstream until 4 or 5 pm at which time we will set up camp for the evening. Our evenings will be filled with group events when appropriate, especially group chores and cooking dinner. Once all the groups chores are done, students may be free for the evening, this will likely be around 9pm. Please know this is a guideline, not a schedule set in stone. We will definitely be on “river time” for a month, and some days may be longer or shorter than others. There will be some extremely difficult days. Stuff happens and we will need to adjust in order to make up for it. We will all enjoy ourselves much more if we work as a group and “go with the flow.”

Weather: Weather in central Virginia this time of year can variable. It is very likely that we will see everything from sunny hot days to wet cool and overcast days while on the trip. Generally it is comfortable during the day with temps in the mid 70's - upper 80's, at night the temperature tends to drop significantly, and will likely be in the mid 50's-60's.

Money: The course fee of **\$600** includes all transportation, food, camping fees, and essential equipment. Participants will want to bring some extra cash for stops and snacks along the way. Personal clothing and some personal gear may need to be purchased by students in order to participate in the course.

Notes on using OAP Gear on OAP trips: Please keep track of the equipment checked out to you. You are responsible for the numbered items checked out specifically to you. Fees will be charged to students if the gear is not returned to the OAP or if it is damaged.

Medical History, Medications and Allergies: OAP trip leaders have wilderness medical training and certifications. It is important for the trip leaders be aware of any preexisting medical conditions, medications you are taking, and any allergies that you may have. It is critical that we know this information before we are in the backcountry. It is your responsibility to notify trip leaders of any medical issues you may have. This information will be confidential and is for your safety.

Group/Expedition Travel Philosophy: On all OAP trips, we travel and participate in activities as a group. We make every attempt to cater to individual requests, needs and goals. Ultimately though, we will make decisions in the interest of safety, the “common good” and on the basis of “majority rules.”

Alcohol and Illegal Substances: OAP activities are sanctioned VCU events. Therefore, in accordance with the campus Alcohol and Drug Policy, alcohol and illegal substances are not permitted on OAP trips and activities. Furthermore, on OAP trips, alcohol and illegal substances become a safety issue for adventure activities. An altered mindset is a safety

issue for the entire group and is not tolerated. We appreciate your cooperation.

Packing List: Students will need to bring certain essentials items with them on the trip. Please remember that we will have to carry what we bring plus additional group gear and food. The personal gear that each person brings will stay with them throughout the entire trip even as we transition from backpacking to canoeing and sea kayaking. The only thing that will change is the container (ie. backpack, dry bags, etc.) It is a good idea to pack two pairs of clothes to have during the day and one warmer set of clothes to wear around camp in the evenings. Plan to dress in layers so that clothing can be added or taken away as the weather changes.

*All Items marked with stars (***) can be checked out from the OAP at no additional cost.*

- 1 Spoon, cup, bowl (**very important, we do not supply**)
- 1 light or medium weight long underwear (top and bottom)
- 1 Warm wool or synthetic sweater (not too bulky)
- 1 Warm hat
- 1 Hat with brim (baseball)
- 1 Rain Jacket
- 1 Rain pants
- 2 Pair hiking socks
- 1 Pair sturdy hiking shoes
- 1 Pair of water shoes or sandals (must have heel strap **NO FLIP FLOPS**)
- 1 T-shirt
- 1 Long sleeve sun shirt
- 2 Quick drying shorts
- 1 Bathing Suit
- 2 Underwear(?)
- 1 Headlamp or flashlight with extra batteries***
- 1 Bandana
- 1 Sunglasses
- 1 Sunscreen
- 1 Lip balm with sunscreen
- 1 Pocket knife
- 1 Small toilet kit:
 - small biodegradable soap
 - toothbrush and toothpaste
 - women, bring tampons
 - do not bring makeup, deodorant, perfume, etc.(it's too heavy!)
- 1 Sleeping bag (at least 20 Degree)***
- 1 Pad***
- 1 2 person tent or shelter (shared with another tent mate)***
- 1 Water bottles, enough to carry 1 gallon
- 1 Large capacity backpack***

- 1 Large capacity dry bag***
- 1 Personal small dry bag***

Optional:

camera, extra film or data card, compass, natural history books