SUMMER SESSION 2017
at the University of Montana's
Flathead Lake Biological Station

UNIVERSITY OF MONTANA
Flathead Lake Biological Station

Come Join Us For Our 118th Year!

- ☑ 3 and 5 credit field courses start June 26
- ☑ many scholarships available!
- ☑ small class sizes, great faculty
- ☑ gain field experience
- ☑ students from around the US
- ☑ credits easily transferable
- ☑ earn 3 to 13 credits in 2 to 8 weeks
- ☑ $100 early registration discount and check out the buddy bonus!

Jun 26–Jul 21

BIOE 342 Field Ecology
BIOL 492 Seminars in Ecology & Resource Mgnt

Jun 26–Jul 7

BIOE 440 Conservation Ecology

Jul 10–Jul 21

BIOE 451 Landscape Ecology
BIOB 491 Aquatic Microbial Ecology

Jul 24–Aug 4

BIOE 416 Alpine Ecology
BIOE 439 Stream Ecology

Aug 7–18

BIOE 453 Lake Ecology
BIOE 458 Forest & Grassland Ecology
BIOB 491 Drone Remote Sensing of Freshwater Ecosystems

Jun 26–Aug 18 Independent Study

BIOE 490 Advanced Undergrad Research
BIOB 499 Undergrad Thesis
BIOB 596 Research in Ecology

About Our Program—Our academic session is a rigorous rewarding field ecology experience. We emphasize hands-on learning outside under the open sky. The summer academic courses substitute for required or elective courses in many college degree plans. By gaining real field experience in a research and education environment, you will be more competitive for graduate school or your next job. These courses are also great for professionals looking to upgrade their basic training.

All courses involve field trips to Flathead Basin area sites including Glacier National Park. Direct observation of biota and ecological processes is stressed and hiking, boating and outdoor field activities are the norm. Most classes involve overnight camping, often in backcountry settings.

Students often backpack on weekends venturing into surrounding wilderness areas and Glacier National Park. You will have abundant photo opportunities while fishing area waters, recreating on Flathead Lake, and kayaking and canoeing on area streams and rivers– some of the extra benefits of an academic adventure to the Crown of the Continent in Northwest Montana.

A Legacy of Ecological Education—Flathead Lake Biological Station opened for students and researchers in 1899. The Station is located on the east shore of Flathead Lake, about 85 miles north of Missoula, MT. During your stay, you can expect to meet a diverse group of people in an atmosphere of scholarly fun. You will be one of about 40 students living in cabins or dormitory rooms.

Other graduate students, research scientists and visiting investigators work and study in this pristine mountain setting on the shores of Flathead Lake. The Station also has a year round full-time research and support staff of about 25 people.

32125 Bio Station Lane, Polson MT 59860-6815 USA | voice 406.982.3301 email flbs@flbs.umt.edu – flbs.umt.edu – flbs.umt.edu/webcams

Scholarships Available

Courses and Registration at FLBS

Courses carry undergraduate semester credits at the 300 or 400 levels and graduate credit at the 400 level or may be taken on an audit basis. Formal admission to the University of Montana (UM) is not required. Official OR unofficial transcripts are required for UM and non-UM students.

Credits earned at FLBS are transferable to UM degree plans in Wildlife, EVST, Field Ecology and Biological Sciences and also to degree programs at most colleges and universities. Transferring credits to another institution simply requires completion of a Transcript Request Form.

Register for 1 or up to 5 classes. Classes are filled with qualified applicants on a first to register basis. Taking a full load of 12–13 credits over the 8-week session is a great way to accelerate fulfilling graduation requirements.

Register online on or before May 24, 2017 at http://flbs.umt.edu/education. Here you enter general student information, select courses and room and board preferences, attach your transcript(s), and make a $30 application fee payment by credit card (Discover, MasterCard or Visa). For other payment options, send an email to flbs@flbs.umt.edu or call 406.982.3301.

Early Registration Discount and Buddy Bonus

Register by **January 15, 2017** and receive a $100 discount on room and board. Early registration helps us plan courses and logistics for the summer session. You help us, we help you!

FLBS is now making it easier for you to experience our summer field courses. If you find a friend who also attends the upcoming FLBS summer session, we'll give you both a $100 discount on room and board. Just mention your buddy's name during registration or after you register but on or before **May 10, 2017**. That's it! It's that simple. Only one mutual bonus buddy is allowed per student and buddies must be accepted to the program before the bonus buddy 'kicks in'.

Scholarships

Numerous academic scholarships are provided through the generosity of many donors for students who apply to the summer academic progam.

Completed scholarship applications are due by April 3, 2017

All qualified, enrolled FLBS summer students (UM and non-UM) are eligible to apply for scholarships. A high percentage of applicants receive an award.

Students achieving Sophomore class standing at the end of Spring 2017 with a G.P.A. of at least 3.0 in the general area of the life sciences are invited to apply. Graduate students are also eligible. Students who demonstrate financial need are also strongly urged to apply.

Complete scholarship applications consist of the following:

1. A statement about why you wish to attend FLBS. Indicate which courses or research work will be undertaken during the summer session. Explain how participation in courses and research at FLBS are relevant to your university curriculum or your plans for future work.
2. Completed application, including $30 nonrefundable application fee plus official or unofficial college transcripts.
3. If applying based on financial need, submit a PDF or print copy of your FAFSA SAR for 2016–2017 or 2017–2018.
4. Two letters of reference from faculty members in support of your request must be mailed or emailed (flbs@flbs.umt.edu) directly by each reference to FLBS.
5. Applicants may email all other scholarship materials to flbs@flbs.umt.edu or send via US mail to: Scholarship Committee, Flathead Lake Biological Station, University of Montana, 32125 Bio Station Lane, Polson, MT 59860-6815.
6. You must confirm that all scholarship materials have been received. Incomplete applications will not be considered.

Scholarship List

Scholarship are provided through the generosity of many donors.

Mary Elrod Ferguson Memorial in Honor of Dr. Morton J. Elrod – Mary Elrod Ferguson bequeathed part of her estate to establish a memorial fund in honor of her father, Dr. Morton J. Elrod. Dr. Elrod founded the Flathead Lake Biological Station (FLBS) in 1899 and devoted his life to the establishment and development of the Station and the Department of Biology at the University of Montana (UM). The scholarship awarded from this memorial is presented to a currently enrolled student at the UM who attends classes at the FLBS.

Dr. Jessie Bierman – Dr. Jessie Bierman, originally a student of the Biological Station in 1921, established an endowment fund that provides support to FLBS for a number of purposes, one being scholarship support for deserving students. Dr. Bierman was a very valued and dear friend of the FLBS.

Eric and Tootie Myhre – Eric and Tootie Myhre, former members of the FLBS Advisory Council, established this scholarship to benefit students at the FLBS.

James Hunter and Colleen Shaw Dion – Marcia Knell, Jane Zackary and William Dion, family of James and Colleen Dion, established this scholarship as a memorial to their parents. Both mother and father were graduates of the UM in 1938 and 1937, respectively. This scholarship is awarded to deserving undergraduate students at UM who are studying at FLBS.

Dr. Robert L. Gilbertson – This scholarship was established in recognition of Dr. Robert Gilbertson's contributions to the science of ecology and plant pathology, and his abiding interest in the West in general, in western Montana and in Flathead Lake in particular; it is awarded to a Montana resident undergrad or graduate student studying at the FLBS.

Matthew Levitan – Matthew Levitan, a 1973 graduate of the UM in political science and history, established this scholarship endowment in 1996. This scholarship is awarded to a graduate or undergrad student at the UM who is studying or conducting research at FLBS. Mr. Levitan is a FLBS Advisory Board member and avid supporter of FLBS students.

Charles "Chuck" Levitan – Chuck Levitan is a faculty member at Sierra Nevada College. Matthew Levitan established this scholarship in the name of his brother.

Robert Levitan – Robert Levitan graduated from the UM in 1982 with a degree in geology. He currently works for DNRC in Helena, MT. This scholarship, provided by Matthew Levitan, is awarded to a deserving undergrad or graduate student at UM who is studying or doing research at FLBS.

Mark Levitan – Matthew Levitan established this scholarship as a remembrance to his brother, Mark Levitan, who passed away as a young adult. This scholarship is awarded to an undergrad or graduate student at the UM who is studying or conducting research at FLBS.

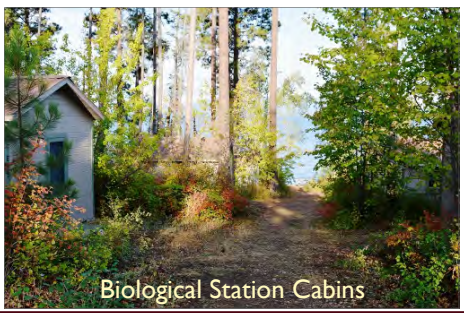
Sara Spero Levitan – Matthew Levitan provided another generous scholarship in the name of his sister, Sara Spero Levitan. The scholarship is awarded to a deserving undergrad or graduate student at FLBS.

Richard and Jane Solberg – Dr. Richard "Dick" Solberg served as Director of FLBS from 1962–1969. Upon his retirement from the UM in 1987, contributions were used to establish a scholarship fund on his behalf. In 2014, Richard and Jane Solberg established a formal scholarship at the FLBS to support graduate or undergraduate students in doing research at FLBS.

James J. Elser Scholarship – Dr. Charles Goldman provided the initial funds in August of 2015 to establish the James J. Elser Scholarship at the FLBS in recognition of Jim Elser's exciting and highly productive career. Dr. Elser's scholarship provides funding for students studying or doing research at the FLBS.

Jack Stanford Graduate Scholarship – This scholarship was established in honor of former FLBS director Dr. Jack Stanford, his long-term service, and his extensive accomplishments in research, education, mentorship and conservation.

Jack and Suzi Hanna – This scholarship was established in recognition of Jack and Suzi Hanna's lifelong dedication to environmental education and conservation of wildlife and their habitat in the Flathead Valley, Montana and around the world. Awards will benefit deserving undergraduate students studying or doing research at the FLBS, with preference given to out-of-state students when possible.


Biological Station Cabins


Prescott Dining Hall


Lakeside Classrooms

Summer 2017 Course Offerings
Four-Week Courses

***FIELD ECOLOGY, BIOE 342, June 26–July 21, Monday–Thursday 8 am–5 pm, Friday 'til Noon, 5 Credits**
Prerequisites: One year of college-level biology, chemistry, and mathematics or equivalents; or consent of instructor. The course provides detailed study and discussion of ecological phenomena including: ecology, behavior and life cycles of organisms; population, community and landscape dynamics; biodiversity and productivity; biophysical processes (e.g., climate change, nutrient cycles, herbivory, predator–prey interactions) and organization (e.g., genomes, ecosystems, biomes, ecoregions) across space (local to global) and time scales; and ecological economics and human ecology. Natural history observations and ecological principles are used to explain biological patterns, processes, responses and complex interactions as influenced by changing environmental conditions. Lectures build upon the laws of thermodynamics and other unifying principles to present ecology as a key discipline of the natural world and essential to human well being. This course is conducted outdoors regardless of weather, including all lectures and lab exercises, so those ecological phenomena can be examined in real time and real life. **All-day and overnight trips will be conducted throughout the course,** taking students into the full range of aquatic and terrestrial environments near the Station and the adjacent mountain areas, including Glacier National Park. Students are expected to take detailed notes and conduct directed measurements that will require analysis and interpretation through written and oral presentations and written reports edited by the professor. Meets writing requirement. *Instructors– TBD and Eric Richins, Faculty-Wildlife and Fisheries, Salish Kootenai College*

SEMINARS IN ECOLOGY AND RESOURCE MANAGEMENT, BIOL 492, June 26–July 21 (Day and Time To Be Determined), 1 Credit (CR/NCR) This seminar involves presentation and discussion of local environmental issues and problems, and is available to any students enrolled for the first 4 weeks of summer session in any combination of courses. *Instructor – Dr. James Elser, FLBS-UM* (http://flbs.umt.edu/people)

Two-Week Courses, Mon-Fri, 8 am–5 pm, 3 Credits

CONSERVATION ECOLOGY, BIOE 440, June 26–July 7 Prerequisites: One semester of college-level biology and an ecology course (BIOE342 Field Ecology at FLBS) or equivalents; or consent of instructor. Principles and methods of conservation ecology applied to aquatic and terrestrial species and ecosystems with emphasis on evolution, population genetics and behavioral ecology as key attributes to be considered in the design and implementation of conservation. This course emphasizes the application of basic biological research to problems in conservation and management with an eye toward the interface between science and policy. Four primary course themes are: defining population units of conservation; the effects of introduced species (including invasive species, hybridization, and infectious disease); habitat modification and climate change; population viability and monitoring; and policy and politics. These themes are applied to a diversity of case studies that have been chosen to illustrate general issues in conservation. A special aspect of the course is spending most of our time in the field with practicing, expert conservation biologists who work for state and federal government agencies or nongovernmental organizations. *Instructors – Dr. Christopher Frissell FLBS-UM* (http://flbs.umt.edu/People)

***LANDSCAPE ECOLOGY, BIOE 451, July 10–21** Prerequisites: One year of college-level biology, chemistry, and mathematics, and an ecology course (BIOE342 Field Ecology at FLBS) or equivalents; or consent of instructor. The objective of this course is to understand the physical and ecological processes that shape landscapes, how these biological and physical processes interact, and how they are responding to global change. We will examine how plants and animals are distributed across landscapes, how the physical template of the environment shapes species distributions and how biotic feedbacks can influence the physical environment. We will examine processes of pattern formation in the environment such as disturbance from fire and how landscape pattern can affect both physical and biological processes. Field trips will underscore concepts and allow data gathering and interpretation by students. Students are introduced to both satellite and airborne remote-sensing tools used in a GIS environment. Students will analyze and interpret spatially explicit data through analyses and oral presentations. *Instructor – Dr. Solomon Dobrowski, CFC-UM* (http://cfc.umt.edu/Personnel/Details.php?ID=1110)

AQUATIC MICROBIAL ECOLOGY, BIOB 491, July 10–21 Prerequisites: One year of college-level biology, chemistry, and mathematics, or equivalents; or consent of instructor. This intensive field course is available to upper-level under-graduate students with interests in environmental microbiology and aquatic ecology and provides a conceptual foundation and experiential field and laboratory training in modern methods in aquatic microbial ecology. Students will explore topics such as physiology and metabolism of aquatic microbes; methods and tools for assessing microbial diversity, biomass, and growth; and the role of microbes in bioelemental cycles. Students will gain hands-on experience with both cultivation-based approaches and cultivation-independent methods for studying environmental microorganisms. *Instructor – Dr. Matthew Church, FLBS-UM* (http://flbs.umt.edu/people)

***VERY IMPORTANT—To participate in courses at FLBS you must be in good physical condition, able to hike up to 10+ miles a day in strenuous conditions at altitude, and properly equipped for a great deal of hiking!**

Two-Week Courses, Mon-Fri, 8 am–5 pm, 3 Credits (Cont'd.)

***ALPINE ECOLOGY, BIOE 416, July 24–August 4** Prerequisites: One semester of college-level biology and an ecology course (BIOE342 Field Ecology at FLBS) or equivalents; or consent of instructor. Distribution, abundance and life cycles of plants and animals and their unique ecophysiological adaptations to life in the rigorous environments of mountains, high above the timberline, with emphasis on the Crown of the Continent area. Students learn about the distributions of plants and animals and study the processes and interactions that are the foundation to ecology in alpine environments. Substantial emphasis is placed on processes that organize communities and the global drivers of climate and how those processes affect alpine systems. The class is organized around field trips (involving extensive hiking) and data intensive class projects that underscore major concepts and allow training in data gathering, analysis, presentation and interpretation by students. *Instructor – Dr. Wendy Ridenour, UM-Western* (https://www.umwestern.edu/academics/biology)

STREAM ECOLOGY, BIOE 439, July 24–August 4 Prerequisites: One year of college-level biology, chemistry, and mathematics, and an ecology course (BIOE342 Field Ecology at FLBS) or equivalents; or consent of instructor. The biota and ecological processes of running waters with unifying principles and contemporary research approaches. This course focuses on the fundamental concepts of stream/river ecology and the physical, chemical and biological processes that characterize running water ecosystems. Students learn principles, concepts and methods of study in a field setting, and obtain hands-on experience in the examination and characterization of stream systems. Over 80% of this course is taught in the field at streamside. Written and oral reports of independent or group studies as directed by the professor are required. *Instructor – Dr. Michelle Anderson, UM Western* (https://www.umwestern.edu/academics/biology)

LAKE ECOLOGY, BIOE 453, August 7–18 Prerequisites: One year of college-level biology, chemistry, and mathematics, and an ecology course (BIOE342 Field Ecology at FLBS) or equivalents; or consent of instructor. Physical, chemical and biological characteristics of lake ecosystems with an emphasis on how physical processes of lake circulation and stratification, nutrient loading and cycling, primary and secondary production and food web interactions, and atmospheric and land/watershed use affects water quality. This course focuses on functional relationships and productivity of plant and animal assemblages in lakes as regulated by physical, chemical and biotic processes. Fundamental concepts of ecology as they relate to the aquatic environment are emphasized. Limnological principles are presented within the context of regional and landscape spatial scales. Students will learn basic and contemporary methods of study in field settings including Flathead Lake, glacial lakes of Glacier National Park, intermontane prairie kettle lakes and nutrient rich lakes with emphasis toward experiential learning and obtaining hands-on examination and characterization of lakes. Written and oral reports of independent studies as directed by the professor are required. *Instructor – Dr. Shawn Devlin, FLBS-UM* (https://flbs.umt.edu/people)

***ECOLOGY OF FORESTS AND GRASSLANDS, BIOE 458, August 7–18** Prerequisites: One year of college-level biology, one semester of college-level chemistry, one semester of college-level mathematics, an ecology course (BIOE342 Field Ecology at FLBS) or equivalents; or consent of instructor. Patterns and processes of forests and grasslands of the northern Rocky Mountains in the context of principles of population, community and ecosystem ecology. This course emphasizes the interactive biophysical attributes and processes of the forests and intermountain grasslands. Students observe and learn about plant and animal distributions, plant community structure and behavior including principles of plant ecology, ecophysiology and plant and animal interactions in these environments. Energy and materials transfer and feedbacks within food webs are used to describe complex interrelationships driving the dynamics of these systems, including both natural and human components as modifiers of systems dynamics. Field trips underscore concepts and allow data gathering and interpretation by students. *Instructor – Dr. Andrew Larson*, CFC-UM (http://www.cfc.umt.edu/personnel/details.php?ID=1710)

DRONE REMOTE SENSING OF FRESHWATER ECOSYSTEMS, BIOB 491, August 7–18 Prerequisites: Prior coursework in GIS is mandatory (FORS 250 Intro to GIS for Forest Management or GPHY 284 Intro to GIS and Cartography at UM) or equivalents; or consent of instructors. Knowledge of remote sensing is preferred, but not required. This course will introduce students to field-based methods of close range remote sensing in freshwater ecosystems; students will gain knowledge of basic spatial analysis through GIS and remote sensing techniques. Students will learn basic application of drones and ADP, two remote sensing instruments of fast growing interest in ecological research and application. Students will learn about essentials to operate drones and ADPs, initial post processing of data products and integrating these data into ecological research and application. *Instructors – Dr. Michael Döering*, ZHAW (http://www.zhaw.ch/en/about-us/person/doei) and *Diane Whited*, FLBS-UM (http://flbs.umt.edu/people)

Independent Study—3 to 8 Credits—Contact FLBS for more information.

UNDERGRADUATE RESEARCH EXPERIENCE, BIOB 497, 3–6 Credits (CR/NCR) Independent research experience in field ecology associated generally with the various research projects at FLBS. Projects are mentored by permanent and visiting FLBS faculty. Send us a short outline of research work you would like to undertake.

UNDERGRAD THESIS BIOB 499, 3–6 Credits (CR/NCR) Prerequisite: Senior standing and consent of instructor. Objective is preparation of a thesis/manuscript based on undergrad research in field ecology for presentation and/or publication. Student must give an oral presentation at the Biological Station. Student provides short outline of proposed research work.

RESEARCH IN ECOLOGY BIOB 596, 1–8 Credits (CR/NCR) Open only to non-UM graduate students. The purpose of this independent research is to solve a specific ecological problem as identified and examined by the student under mentorship of a Biological Station professor. Independent research includes design, analysis and reporting of ecological data. Student provides outline of proposed research work.

"The whole class was an aha moment! The course work was intense, but you learned real world experience doing field ecology." Alumna Katie Mehrens

Fees

Course fees for residents and nonresidents are $450 per credit. This includes a credit recording fee assessed by the School of Extended and Lifelong Learning. The final amount owed is based on the number of credits you elect to take plus the appropriate housing and meal plan. See page 2 for Early Bird and Buddy discounts.

Credits	Tuition	Credits	Tuition
3	$1,350	**9**	$4,050
5	$2,250	**10**	$4,500
6	$2,700	**11**	$4,950
7	$3,150	**12**	$5,400
8	$3,600	**13**	$5,850

Housing and Meals

Living on the Biological Station grounds is required to allow full-time interaction between students, instructors and the world-class research program here. A number of housing/meal plans are available to meet student needs.

There are a total of 40 cabins; 30 are double occupancy (12' x 14') and 10 are larger and accommodate 4 people (12' x 24'). The larger cabins are reserved for faculty or students with families.

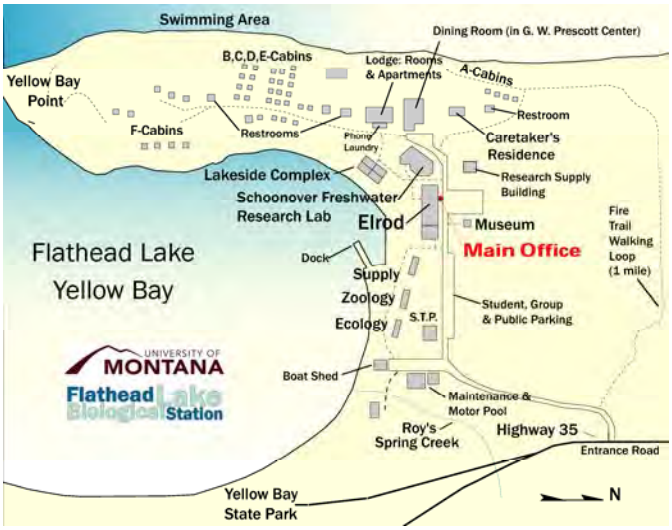
All cabins are heated and furnished with lights, electricity, two twin-size beds, chairs, desks, closets, and wireless access. Restroom and shower facilities are located near the cabins. Dormitory rooms are available in single or double occupancy. See http://flbs.umt.edu/tour/ for FLBS campus tour.

Housing and Meal Fees		Double Occupancy		Single Occupancy	
2 Weeks:	Selected by students enrolled for 2 weeks	Cabin	$ 525	Cabin	$ 615
		Dorm	$ 545	Dorm	$ 570
4 Weeks:	Selected by students enrolled for 4 weeks	Cabin	$1,050	Cabin	$1,230
		Dorm	$ 1,090	Dorm	$1,140
6 Weeks:	Selected by students enrolled for 6 weeks	Cabin	$1,575	Cabin	$1,845
		Dorm	$1,635	Dorm	$1,710
8 Weeks:	Selected by students enrolled for 8 weeks	Cabin	$2,100	Cabin	$2,460
		Dorm	$2,180	Dorm	$2,280

Reservations are accepted on a first to register basis for qualified applicants. **Cabins are usually the housing of choice**. Let us know in the appropriate space on your application if you have a roommate preference (i.e., particular person, nonsmoker, etc.).

Housing student family members at FLBS is contingent upon available space. All students, staff, family members and guests staying at the Biological Station are required to pay full housing and meal rates. All housing assignments are final.

- **Check in Sunday afternoon before first scheduled class day**.
- Check out 11:00 am on the day following your last scheduled class day.
- Pets are not allowed on Station grounds.
- As part of the University of Montana, **FLBS is a tobacco-free campus**.
- Due to the danger of forest fires, personal cooking by students is not allowed.



Medical insurance is not included in fees. Students are strongly encouraged to carry medical health insurance as it is not available through the Flathead Lake Biological Station. Medical facilities are available in the nearby towns of Polson, Bigfork, and Kalispell.

Payment details; READ CAREFULLY. *All fees subject to change.*

Due Date	Pay by Credit Card	Late Payment	Cancellations
Full tuition, housing and meal fees are due no later than May 31, 2017.	Online payments are made by credit card. Discover, Mastercard and Visa are accepted at FLBS. Contact 406-982-3301 if you unable to pay by credit card.	If payment is not made by the due date of May 31, 2017, your courses are not guaranteed and your seat may be given to waitlist applicants.	Cancellations must be received in writing before 5:00 pm on May 24, 2017. Fees paid on or before May 24 less the $30 application fee will be refunded. Cancellations made after May 24 will result in forfeiture of all fees paid to date.

Other Services

FLBS Bookstore. Textbooks and basic course supplies may be purchased at the FLBS Bookstore. You are provided with a list of necessary items upon acceptance to our program. Cash, personal checks, traveler's checks, money orders and credit cards (Discover/MasterCard/Visa) are accepted in payment for books and supplies.

Banking and Telephone Services. Either traveler's checks or a debit card offer added convenience for the duration of your stay . The nearest bank, for cashing personal checks, and ATM is 15 miles north of the Station in Bigfork. ATMs are available in nearby towns (10–15 miles). A telephone credit card or prepaid phone card is useful as most calls are long distance and must be placed using pay phones. Cell phone service is available in this area, but coverage is spotty.

Climate and Dress

Generally, everyone dresses casually. The last two weeks in June can be somewhat chilly and damp. Bring a cold weather jacket and warm clothes (layers recommended). See average area temperatures below.

	June	July	August
Average Highs °F	71	80	78
Average Lows °F	44	47	46

Student Mailing Address

You will be assigned a box for mail and messages. Outgoing mail may be sent on normal mailing days; incoming mail should be addressed using the following address:

Your Name
32111 Bio Station Lane
Polson, MT 59860-6815

Computers / Internet Access

FLBS no longer maintains a student computer lab. We strongly recommend bringing your own laptop. Microsoft Office is also recommended for optimal collaboration with faculty and peers. Bringing your own laptop also allows enrolled students to access:

- Wireless internet
- Classroom printers
- Shared server storage and software, including access to Microsoft Office (Word, Excel, and Powerpoint), SPSS statistics software, and Endnote reference manager software

Items-to-Bring Checklist

Students, faculty and staff need to bring the following items for their stay at FLBS:

- ☐ Blankets
- ☐ Bed linens (twin-size sheets, pillows, etc.; mattress pad provided)
- ☐ Towels, toiletry articles
- ☐ Proper clothing
- ☐ Full rain gear is essential plus umbrella
- ☐ Hiking boots (not too stiff, and broken in)
- ☐ Hot/cold mug and water bottle
- ☐ Lunch pack-up container (small divided Rubbermaid-style container or two small containers; lunch is packed every day
- ☐ Flashlight/headlamp, batteries
- ☐ Laundry soap/Quarters for laundry
- ☐ Alarm clock
- ☐ Sunglasses, sunscreen and cap/hat
- ☐ Daypack and backpack, sleeping bag
- ☐ Mess kit for field trips & weekends (plates, cups, storage container, eating utensils)
- ☐ Camera/digital camera (optional)
- ☐ Laptop computer (highly recommended)
- ☐ Prepaid phone card or cell phone
- ☐ Money/ATM card
- ☐ Also see online equipment list http://flbs.umt.edu/Education/SS_Logistics.aspx#Checklists

FLBS on Yellow Bay, east shore of Flathead Lake, about 85 miles north of Missoula

See Online Tour at http://flbs.umt.edu/tour and Webcams http://flbs.umt.edu/webcams

Travel Options and Rides to FLBS

Driving—Many students drive their own vehicles to the Biological Station. If you want riders or need a ride, please use the online **Student Rider Board** (available after applying online for summer session). Note that without your own vehicle, you will need to network with other students to get to town (~15 miles) and/or for weekend adventures. Find directions at http://umt.edu/flbs/AboutFLBS/Location.aspx.

Flying—FLBS advises flying into Glacier International Airport (FCA), ~42 miles north of FLBS. Students sometimes find it is cheaper to fly into Missoula International Airport (MSO), ~85 miles south of FLBS, but consider additional transfer costs when making your arrangements.

Train—Amtrak (Empire Builder Route http://www.amtrak.com/empire-builder-train) makes a daily stop in Whitefish (~47 miles north of FLBS). The Westbound train arrives late p.m., while the eastbound arrives early a.m.

Transfer Options No-Fee FLBS Shuttle – June 25 and August 19 ONLY

Whether you choose to fly or take a train, you must also transfer from your arrival point to FLBS. FLBS offers a no-fee shuttle from the Kalispell Glacier International Airport on June 25 and August 19. Shuttle service is available under the following limitations:

- You must notify FLBS of your itinerary details by 4 p.m. MDT, Thursday, June 22, 2017.
- For June 25, 2017 arrivals, the last shuttle will leave the airport as needed and confirmed, but no later than 5 p.m.
- For August 19, 2017 departure, a shuttle will leave FLBS to Glacier International Airport at ~4:30 a.m. You may optionally contact Glacier Charters 406-892-3390 to prearrange and confirm taxi service for other dates and times. For all other airport departures, plan to network with other students with vehicles for a ride (**see online Rider Board**).

Other Transfer Options

From Glacier International Airport (FCA) to FLBS ~42 miles

- FLBS shuttle is available June 25 and August 19
- Car rentals
- Taxi (van) service from airport to FLBS (~$100, Glacier Charters at 406-892-3390). **All taxi services must be prearranged and confirmed by students.**

From Missoula International Airport (MSO) to FLBS ~85 miles

- Car rentals (No shuttle available)
- Greyhound bus to Polson and taxi from Polson to FLBS

Plan for additional expenses: taxi fare(s) from the Missoula airport to downtown Missoula Greyhound bus terminal and/or overnight lodging; overnight stay (~$100 up) in Missoula due to flight and bus schedule connections; bus ticket from Missoula to Polson (Greyhound 406-549-2339 ~$20 one-way); taxi from Polson bus stop to Yellow Bay (~$25 student rate, South Lake Taxi 406-883-9220).

Whitefish Amtrak Train Depot to FLBS

- Taxi service from train station to FLBS (~$100 for first person and $3 for each additional person Glacier Charters 406-892-3390)
- Car rental (Hertz 406-863-1210)
- On June 25, 2017 ONLY, you may take a taxi from the Whitefish depot to Glacier International Airport to connect to the FLBS shuttle (see limitations above).

APPLY NOW! Registration link is:

http://flbs.umt.edu/education

Before you apply—please be sure to first review information on courses, fees, housing/meals, scholarships and logistics.

Classes are filled with qualified applicants on a first to register basis, so apply as early as possible, but no later than May 24, 2017.

Important 2017 Dates and Deadlines

Minimum Enrollment Review:	5 pm MDT March 31, 2017
Scholarship Materials Due:	Midnight MDT April 3, 2017
Application and Cancellation:	Midnight MDT May 24, 2017
Fees Due:	Midnight MDT May 31, 2017

Classes can fill sooner than the application deadline, so early registration is important. Courses require minimum enrollment by March 31 and may be subject to cancellation.