

# Dartmouth

*The Frank J. Guarini Institute for International Education*

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April 2015

TO: Participating Students – Earth Sciences FSP (the “Stretch”) -Fall 2015

FROM: John Tansey, The Guarini Institute, Executive Director

SUBJ: Program Information

DATES: Arrival: Friday, September 4, 2015 (*by 4:00 pm*)  
Departure: Sunday, November 15, 2015

CC: Ed Meyer, EARS FSP, Faculty Director

This memo (and the attached Travel, Health & Safety Guidelines and Expectations sheet) contains information regarding many essential, non-academic aspects of the Fall 2015 Earth Sciences FSP in Canada and western United States, and a few academic-oriented reminders. Please pay special attention to the arrival and departure instructions that are outlined in this document. Review each section so that you may plan accordingly. You may want to save this document in both physical and digital locations for your ease of retrieval while traveling. Best wishes as you pursue this highly engaging academic and adventurous experience in the Canadian Rockies and western United States.

## **ARRIVAL and DEPARTURE**

### Travel Details

The Earth Sciences Foreign Study Program (The Stretch) begins this year in Calgary, Alberta, Canada, on September 4th. You will need to get yourself to the Calgary International Airport, on September 4<sup>th</sup>, preferably by 4:00 pm, and BY 5:00 PM AT THE LATEST. Professor Bob Hawley and TAs (Teaching Assistants) will arrive at the airport in the afternoon of the 4th to meet up with you. You will be spending the night of September 4th in Calgary, then driving to Banff on the September 5th. If you cannot arrive in Calgary by 5:00 pm on the 4th, you should book a flight on September 3rd, and plan to spend the night in Calgary.

The program will end in Flagstaff, AZ, on November 15th. You should book your departure out of Flagstaff on the morning of the 15th. Vans will depart for the east coast at 12:00 pm. After that time, rides to the airport will not be available.

**You are responsible for booking and purchasing your own flights to Calgary and from Flagstaff.** The connection between Calgary and Flagstaff is considered an “open jaw” or “ground connection” if you are purchasing a round-trip ticket, but two one-way tickets are almost always more cost effective. **We suggest that you book tickets as soon as possible.**

**This will save you quite a bit on the airfare. Be sure you let Professor Meyer know your flight numbers and arrival time into Calgary on September 4th and your departure information from Flagstaff on November 15<sup>th</sup>.**

**Note for the return trip:** It is possible to take a shuttle van from Flagstaff to Phoenix Sky Harbor Airport on the morning of the November 15th. Please take a look at the Sky Harbor to Flagstaff route on [ArizonaShuttle.com](http://ArizonaShuttle.com). Please do NOT book the 2:30 am shuttle.

The Earth Sciences Department will handle your travel arrangements for the rest of the Stretch between September 4th and November 15th. During this time you will be provided with all lodging and meals (including meals on off days.)

**Remember to make your airline reservations early!**

Note: You may choose to ride back in the vans, but all food and hotel costs will be your responsibility (note that this is seldom cheaper than flying home). Vans drive directly back to Hanover and will not deviate to drop you off along the way. Space in the vans is limited to 6 students (4 students in years with only two vans).

**In order to ride back in the van you MUST obtain prior approval from Ed Meyer before August 15th.**

Rides out to Calgary will not be offered because vans depart before the end of summer term.

### **1. Where do I go when I arrive?**

After clearing immigration when you arrive, claim your luggage and briefly check your bags for any damage. Any damage or missing bags should be reported to the airline.

You may want to convert some money, as you will be spending your first week in Canada. ATMs are ubiquitous at the airport and are easy to use.

Professor Hawley and the TAs will meet you near the exit from International Arrivals/Customs at the Calgary International Airport on the afternoon of September 4th, and they will see that you get to your hotel in Calgary. If you arrive on a domestic flight from within Canada, Professor Hawley will meet you at Baggage Claim if the schedule allows; otherwise, make your way to the International Arrivals exit, on the same level.

Once you have arrived, make sure to exercise due caution especially since you may be tired or distracted by your new surroundings. The first 24 to 48 hours in a new location is a vulnerable time period – slow down, think carefully about the decisions you are making.

➤ **You should give your travel itinerary to your Faculty Director (FD) well in advance of traveling and keep the FD up to date about any pending or actual travel changes, as you journey to and within Canada.**

## 2. What do I do if my arrival is delayed?

Please look at your travel itinerary and do some contingency planning in advance of your travel. For example, what would you do if your travel plans were interrupted at different junctures? Research and document now some alternative modes of travel and accommodations at each travel juncture, paying close attention to the listed times of operation of facilities and services. Consider the implications of delays that cause you to arrive in the middle of the night, on a holiday, and so forth. If you take prescription medications, please make sure you travel with an adequate supply of your medication. Please give a copy of this information to a guardian in case you are in need of their assistance while traveling.

- **If you haven't done so already for this Dartmouth program, register your specific travel itinerary, contacts, passport, relevant legal documents, and medical information with International SOS. <http://www.internationalsos.com/>. Your membership number is: 11BSGC000018. Carry with you the ISOS card provided to you at the health and safety meeting.**

**If your arrival is delayed prior to your departure** (which should only occur in the event of a family or health emergency), please contact Ed Meyer promptly ([REDACTED]).

**If your arrival is delayed while en route**, it should not be a major problem. Please make every effort to contact Professor Bob Hawley via telephone ([REDACTED]) or email. He will try to assist you with contingency planning and/or simply track your new travel plans. **If Professor Hawley cannot be reached, please contact Professor Meyer ([REDACTED]).**

If you need immediate assistance that is not locally available, please contact International SOS' Assistance Center in Philadelphia at +1.215.942.8226.

## 3. In summary, here are some important contacts.

### **Professor Ed Meyer**

Stretch Faculty Director, and  
Director of Field Programs (Earth Sciences)

Office Phone: 603.646.1612

Home Phone: [REDACTED]

Cell phone: [REDACTED]

e-mail: [Edward.E.Meyer@dartmouth.edu](mailto:Edward.E.Meyer@dartmouth.edu)

### **Professor Bob Hawley**

Assistant Professor in  
Glaciology & Remote Sensing

Cell Phone: [REDACTED]

e-mail: [Robert.L.Hawley@dartmouth.edu](mailto:Robert.L.Hawley@dartmouth.edu)

### ***If they are not available, contact:***

### **Professor Brian Dade**

Chair of Department of Earth Sciences

Office Phone: 603.646.0286

Home Phone: [REDACTED]

e-mail: [Brian.Dade@dartmouth.edu](mailto:Brian.Dade@dartmouth.edu)

### **Patricia Alves**

Earth Sciences Administrator

Office Phone: 603.646.2373

e-mail: [patricia.l.alves@dartmouth.edu](mailto:patricia.l.alves@dartmouth.edu)

## **HOUSING**

### **What do I initially need to know about housing?**

Accommodations vary from guest ranches, field stations, hostels, and motels to tents and sleeping bags. Transportation during the program is by van. Your Faculty Director will provide a detailed schedule of lodging and contact information later this summer.

## **FINANCES & EXPENSES**

### **What should I expect are my general financial obligations for participation in program?**

Tuition is \$16,040.00. This charge will be billed to your student account.

If you receive financial aid and have questions about how it will apply to this program, please contact the Financial Aid Office or the Guarini Institute.

Room, Board and Transportation fee is \$5,100, which covers all meals, hotel and lodging fees and van rental/transportation for the entire Stretch. Dartmouth will pay this fee, and it will be placed on your student account in Student Financial Services.

Food: Food will vary: it may be cooked over a camp stove or in a bunkhouse kitchen, served to you at lodges and dude ranches, or ordered in restaurants. Lunches will generally be sandwiches, fruit, chips, and the like, made that morning and carried in the field, or stored in coolers in the vans. Later in the summer, you will be asked about your food preferences (e.g. vegan, dairy/egg vegetarian, omnivore). They will do their best to accommodate you, but please keep in mind that they may not always be able to, either because of the logistics of group living or because of lack of availability in the rural areas where you will be staying.

You will be provided with a per-diem to cover food expenses from restaurants. The per-diem is paid in the form of a cash advance. Patty Alves, the EARS department administrator, will be in touch with you over the summer to arrange your advance. The cash advance must be collected before you leave for the Stretch!

Spending Money: It is recommended that you bring \$500-\$750 for personal items, snacks and any meals you choose to eat outside of the meals provided by the program. You must take sufficient funds with you to meet these expenses.

You cannot borrow from Dartmouth College should you need more money. Carry what money you may wish to spend in cash. ATMs are available throughout the U.S. and Canada, but don't count on finding one at all times, as you may or may not be near a town when you run out of cash. ATMs in Canada will accept ATM cards from most major U.S. banks, but MAY NOT accept ATM cards issued by small local U.S. banks or credit unions. It may be desirable to have a credit card available as well (for unexpected purchases.)

## **ACADEMIC PROGRAM**

### **What general information do I need to know about planning for my academics?**

The term is divided into 1-2 week segments, each in a new location and taught by a different faculty member.

You will be met at the beginning of each segment by the professor(s) and/or teaching assistants leading that segment. A full itinerary of where you will stay each night will be given before you leave for the trip.

### **Courses**

**Earth Sciences 45:** Field Methods: Techniques of Structural and Stratigraphic Analysis

**Earth Sciences 46:** Field Methods: Environmental Monitoring and Assessment

**Earth Sciences 47:** Field Methods: Earth Hazards and Resource Assessment

Dartmouth's Registrar's Office will automatically enroll students in Earth Sciences 45, 46, and 47. You do not need to register for these courses.

Below is the schedule of Stretch segments. You will be provided a detailed schedule of lodging and contact information later this summer.

Sept. 4: Arrive Calgary by 4:00 p.m. (or, if necessary, arrive Sept. 3rd)  
Sept. 3-10: Glacier segment with Bob Hawley  
Sept. 11: Change day  
Sept. 12-21: Glacier National Park / Bighorn Basin segment with Meredith Kelly  
Sept. 22: Change day  
Sept. 23-30: Economic Geology segment with Devon Renock and Ed Meyer  
Oct. 1: Change day / Field Day (Renshaw)  
Oct. 2-15: National Parks segment with Carl Renshaw  
Oct. 16: Change Day  
Oct. 17-24: White Mountains (CA) segment with Brian Dade  
Oct. 25: Change day  
Oct. 26- Nov. 2: Death Valley segment with Leslie Sonder  
Nov. 3: Change day  
Nov. 4-14: Arizona segment with Ed Meyer  
Nov. 15: Fly home

### **Passport**

All program participants are required to have a valid passport. Some countries require that your U.S. passport be valid at least 6 months or longer beyond the dates of your trip. If your passport expires before the required validity, you will have to apply for a new one. If you have not already

applied for your passport, please do so immediately. Be sure to keep a photocopy of the front page of your passport at home and in several other places. If you should lose your passport, this will help expedite the process of getting a new one. In country, you should carry a photocopy of your passport with you at all times. A scanned copy of your passport can be stored at the Dartmouth College International SOS website. Please log on to the ISOS website using the Dartmouth College group membership number and follow the link “Activate your Emergency Record.”

### **Visas**

U.S. citizens do not require a visa to visit or transit Canada. According to the Government of Canada website, to visit Canada, you must:

- have a valid travel document, such as a passport;
- be in good health;
- satisfy an immigration officer that you have ties, such as a job, home, financial assets and family, that will take you back to your country of origin;
- satisfy an immigration officer that you will leave Canada at the end of your visit; and have enough money for your stay. The amount of money you will need can vary with the circumstances of the visit, how long you will stay and whether you will stay in a hotel or with friends or relatives. For more information, ask the Canadian visa office in your country or region.

Non-U.S. citizens must check with their embassy or nearest consulate to determine if a visa is needed: <http://www.cic.gc.ca/english/visit/visas.asp>

If you determine that you need a visa, you should apply at the nearest Visa Application Centre (VAC) well before your departure; the process can easily require several weeks.

Instructions on how to apply can be found at:

<http://www.cic.gc.ca/english/information/offices/vac.asp>.

### **Alcohol and Drugs**

**The Department of Earth Sciences insists that you do not engage in any activities that could tend to jeopardize you, or your peers, or that could adversely affect the standing of the program, our local hosts, or Dartmouth College as a sponsor.** Possession and use of illegal drugs, including marijuana, is expressly forbidden. You are required to abide by the legal drinking age. If you are of legal age to drink, you are expected to consume alcohol in a responsible manner and only after the field/travel day has ended. Consistent with college policy, **“hard” alcohol is not permitted on the program.** You are also expected to abide by laws restricting you from distributing alcohol to other students who are minors. Please remember that the Stretch is a college-sponsored activity, and therefore the college Alcohol and Drug policy is in effect at all times (including off days.)

Please make yourself familiar with the policy:

<http://www.dartmouth.edu/judicialaffairs/standards/policies/alcohol.html>

Failure to meet the standards outlined here and in the Alcohol and Drug policy document referenced above, or simply to exercise good judgment at all times in general, can result in your immediate dismissal from the field program.

### **Gear and Supplies**

You should bring only those items listed on the list below plus your own clothing choices. Minimizing gear is very important because we have tight space while traveling. Keep your gear in a duffel bag, zippered soft bag, internal frame pack or carry-on luggage - **not** external frame packs. You will be living out of your bag so one with multiple compartments is handy. Luggage will be stuffed, sometimes forcefully, into trailers for traveling, so do not bring fragile items. Please try to limit your baggage; if everyone brings large bulky items it can be hard to pack the trailers.

A daypack in which to carry water, food, and some weather gear during our daily activities is a *necessity*. During some segments, you'll be travelling by day and spending the night in a different motel or hostel each night, so you may also want a small collapsible bag for one-night stays in motels rather than lugging your large duffel around.

You can anticipate weather that will range from snow, below freezing temperatures, and wind, to desert heat in the 90s or even 100s. Bring clothing that is easily adaptable and layerable. Sometimes it may be a week between laundry opportunities, so be prepared to re-wear or wash clothes in a bathroom sink. Pay particular attention to footwear. In most of your field sites, proper trail/hiking shoes should be worn; sandals or tennis shoes just don't cut it. Waterproof boots for snowy conditions are a good idea. Since fieldwork can be a dirty affair, you may want to bring one set of nicer clothes in addition to the dusty 'field' clothes that you've worn all day. Sleeping bags and extra clothing can be sent back to Hanover in the trailers at the end of the Stretch.

### **Camping:**

1. Warm sleeping bag (rated to **at least 20°F** - You might even consider 15°F or an additional liner to add warmth.) A collapsible pillow is a nice luxury!
2. Ground pad/air mattress (*collapsible*)
3. Towel
4. Unbreakable plate, bowl, cup and silverware (spoon, fork, knife) with your name marked indelibly
5. Headlamp with extra batteries
6. Sleeping bag liner (fleece) – for extra cold nights

### **Equipment and Materials:**

1. Day pack
2. 2 water bottles (liter sized) and/or camelback
3. Sunglasses. *Essential* for desert and glacier work (these need not be “glacier” glasses).
4. Sunscreen. *Essential* for desert and glacier work.
5. Pocket knife
6. Camera and memory cards

7. Binoculars (optional)
8. Rock hammer (purchase from EARS department office – 228 Fairchild)
9. Hand lens (purchase from EARS department office)
- \* 10. Brunton compass (lent by EARS department)
- \* 11. Two field notebooks (issued by EARS department office)
- \* 12. Metal clipboard (lent by EARS department)
- \* 13. Guidebooks/workbooks to segments (provided at beginning of segments)
14. Calculator
15. Protractor
16. Colored pencils (6 colors)
17. Metric ruler
18. Pencils and pens. (Former Stretchies tell us that mechanical pencils are valued as if they were made of gold. Definitely bring your own stash.)
19. Fine point, felt-tip pens for drafting (a kit with several pen widths, e.g., 00, 0, 1, 2 – can be found at most office supply stores)
20. A spiral notebook or lined paper, and a small supply of graph paper.
21. Emergency space blanket (to remain in your day pack, just in case)
22. Optional but recommended: A laptop computer. Though your days are spent in the field, you do use computers on the Stretch to interpret or display field data and to write project reports. In addition, wireless access to the Internet is increasingly available at hotels where you stay. They take approximately six departmental laptops, enough that it is not essential to take your own, but many students like to have their personal computer accessible. The Stretch is hard on laptops. If you are thinking of taking one, PLEASE check whether it is still under warranty or not, and consider the risk of damage to your computer. *The Department cannot be financially responsible for damage to, or loss of, your computer. Laptops may have to ride in the trailer which is quite a rough and tumble environment.*
23. A lunch box, Tupperware, or some other device to carry your lunch into the field.

\*A Brunton compass and a metal clipboard will be loaned to you by the Department (go to the Department office). Guidebooks/workbooks for the various segments will be handed out. If you do not have a rock hammer and/or hand lens, they must be purchased from the Department office before the beginning of the program. Please note: **You will be financially responsible for your Brunton and Clipboard (Bruntons are \$400 to replace and clipboards \$25.)**

**Contact Lens Users** *If you wear contact lenses, bring glasses also.* Contacts are often uncomfortable in dusty terrain. Be sure to take along extra eyeglasses or contact lenses and lens solution.

### **Absolute Essentials**

Be sure to take along a sufficient supply of any medication you need. Be sure to bring enough medication to last for the duration of the program (~75 days' worth, with travel.) Another item that students from past programs wished that they had brought is **a watch with an alarm.**

## Clothing

Take grubby clothes, as you will be hiking, scrambling, sitting on the ground, and in general developing a close relationship with rocks, soil, ice, and dirt.

1. Swim suit
2. Durable pants and shorts
3. Good quality field/trail boots with a rugged Vibram® style sole.
4. Running or trail shoes
5. Warm-weather footwear such as Teva sandals
6. Non-cotton jacket and/or mid weight fleece
7. Socks, underwear, etc.
8. Cold-weather clothes. On some segments the weather can be cold, windy, and snowy (**expect temps down to about 15°F.**) You will want to layer to be comfortable being both active and inactive in cold weather. This clothing should include:
  - Non-cotton winter jacket
  - Gore-Tex Shell or other outerwear for rain and wind
  - Heavy weight fleece or wool outer layer
  - Waterproof pants (something sturdy, warm, and not made of cotton; imagine sitting on a glacier)
  - Hat, mittens, gloves
  - Non-cotton Long underwear (2 pair)
  - Wool socks
  - Gaiters (for hiking in snow; optional but recommended)
9. Warm-weather clothes. On some segments, the weather can be very hot and dry.
  - Shorts
  - T-shirts or sleeveless shirts
  - Broad-brimmed hat to shade against sun
10. One set of slightly nicer clothes for an occasional dinner out

## Other items (optional)

1. Crazy Creek chair or foam pad.
2. Collapsible trekking poles
3. Music. There is a lot of time spent in the vans, so iPods (+ radio adaptors) are popular items.
4. Playing cards, *small* board games, paperback books. For passing time in vans and those evenings when you are not working.
5. AC to DC adaptors for charging batteries when driving
6. Calling Card (many of our lodging options lack cell phone service, but have guest payphones).
7. Down jacket – nice on those really cold nights at the Grand Canyon.

Space permitting, a student can bring exercise equipment on the Stretch, subject to the following stipulations:

1. Prior approval must be obtained from the Stretch faculty
2. The student must take responsibility for loading and unloading it from the trailer; it should not impede access to any camping or scientific gear.

3. The student must accept all responsibility for any damage.
4. The equipment should be available for use by all Stretch participants.
5. Due to safety concerns, use of the equipment is limited to the local area where the Stretch stays, i.e. no bikes (unless used solely with stationary trainer), roller skis, etc.

Be sure you can comfortably carry everything you plan to take with you. If you cannot, unpack and start again! There will be little storage room for suitcases in the different places you stay. Do not pack too much!

### **Internet Access / Computers**

Internet and cell phone access are spotty at best. Some locations may have basic broadband and good cell phone coverage while others may not. Plan to have some days with limited contact with the outside world. Many of the lodging options do have pay phones, so bring a calling card.

<b>Segment</b>	<b>Cell Service?</b>	<b>Internet?</b>	<b>Laundry?</b>
Canada	Sometimes (international)	Yes, very limited bandwidth	No
Glacier	Very Spotty	Yes, very limited bandwidth	No
Wyoming (Shell Area)	Very Spotty (none at night)	Yes, limited bandwidth	Limited
Montana (K-Z)	None		Yes, fee
Parks Segment	Spotty in parks (good in majors towns)	Some nights yes, some nights no	Occasional Laundromats
Bishop, CA	Good most of the time	Yes	Yes, fee
Death Valley, CA	Spotty	Yes	Yes, fee
China Ranch, CA	None	Yes, very limited bandwidth (nearly useless)	No
Flagstaff, AZ	Good	Good	Yes, fee
Grand Canyon, AZ	Good on rim	None	No

### **Questions, Comments, and Concerns During the Program**

If you have any questions, comments or concerns during the program please bring them forward. Most issues can be addressed by speaking with individual faculty members and/or TA's. In some situations you may feel it more appropriate to bring concerns directly to Ed Meyer. If you have a concern that you would like handled through a neutral third party you may also contact:

Patty Alves @ [Patricia.L.Alves@Dartmouth.edu](mailto:Patricia.L.Alves@Dartmouth.edu),  
 or the Guarini Institute @ [Off.Campus.Programs@Dartmouth.edu](mailto:Off.Campus.Programs@Dartmouth.edu).

Ed and Patty will check in with you periodically throughout the program to make sure things are running smoothly. You will also have an opportunity to fill out course evaluations and provide feedback at the end of the program. That said, please don't let problems fester.

**Please note:** As previously mentioned, additional policy will be discussed during the Stretch policy meeting (time TBD) in the summer term. At that time, the formal policy and safety

guidelines will be handed out, and you will be asked to sign a pledge that you will adhere to these policies and safety guidelines.

You should not find it hard to follow the advice and expectations for your participation on the program that we've shared in this letter. We do want to be sure you know what they are, however, so that you have the best possible experience, and there can be no misunderstandings.

**Have a wonderful, enriching and memorable term!**

**ADDITIONAL INFORMATION ATTACHED**  
**Travel, Health & Safety Guidelines and Expectations**

