

Short-Term Study Abroad Program Information

Please provide the following information:

Study Abroad Program Name: Biotechnology in Scotland
 Study Abroad (SABD) Course ID: SABD 1314
 Study Abroad (SABD) Course CRN: TBD
 Semester Program will be Offered: Summer 2023
 Program Director/Contact Name: David Blum
 Program Director/Contact Phone Number: 706-542-1035 / 615-830-4013 (cell)
 Program Director/Contact Email Address: blum@uga.edu
 Program Start Date (First meeting with enrolled students): 16-Jun-23
 Program End Date (Last meeting with enrolled students): 11-Jul-23
 Travel Start Date: 16-Jun-23
 Travel End Date: 11-Jul-23
 Anticipated Number of Total Students Participating in Program: 25
 Anticipated Number of UGA Students: 24
 Anticipated Number of Transient Students: 1
 Anticipated Number of Undergraduate Students in the Program: 25
 Total Number of Credit Hours Taken by Each Undergraduate Student: 7
 Anticipated Number of Graduate Students in the Program: 0
 Total Number of Credit Hours Taken by Each Graduate Student: 7

Please list each course offered through the program on a separate row below:

Course Title	Course Prefix	Course Number	Credit Hours	Schedule Type	Instructor(s)	Department of Instructor(s)	Course Start Date	Course End Date	Total Lecture Hours	Total Field/ Lab Hours	Total Contact Hours**
Bioprocess Technology	BCMB	4030L	4	Supervised Lab	Blum	Biochemistry	6/17/2023	7/11/2023	38.0	32.0	54.0
Special Topics in International Business	INTB	5100	3	Seminar	Bramorski	Management	6/17/2023	7/11/2023	35.0	7.0	38.5

*Please work with department schedulers and OIE to ensure that all academic courses are scheduled in the same Part of Term as the program SABD course.

Please also complete the Academic Itinerary found on the second worksheet of this document.

**Total Contact Hours = Total Lecture Hours + (Total Field Hours Courses require 12.5 contact hours for each credit hour earned)

For questions, please contact the Office of Curriculum Systems at csabroad@uga.edu or 706-542-6358.

Sample Academic Itinerary

Study Abroad Program Name: Biotechnology in Scotland
Study Abroad Course ID: SABD 1314
Program Start and End Dates: June 17 - July 11, 2023

Instructors and Courses Taught:

Instructor	Course(s) Taught
Dr. David Blum	BCMB 4030L
Dr. Tom Bramorski	INTB 5100

*All courses should be taught independently. Please include individual class days and times for each course.

**If multiple courses are offered in the program, please use a new column for each course

Date/Time	Activity Description*	Instructor(s)	Contact Hours			
			BCMB 4030L		INTB 5100	
			Lecture	Field	Lecture	Field
Saturday, April 16	Pre-departure					
Morning	Program orientation	Dr. Blum Dr. Bramorski	1.0		1.0	
Afternoon	Pre-departure instructions - Study Abroad general meeting	Dr. Blum Dr. Bramorski	1.0		1.0	
Evening	Pre-departure lecture - Scotland BCMB meeting	Dr. Blum	1.0			
	Pre-departure lecture - Scotland INTB meeting	Dr. Bramorski			1.0	
Saturday, June 17	Day 1: Arrive in Edinburgh		Lecture	Field	Lecture	Field
Morning	Arrive from Atlanta					
Afternoon	API organized airport reception with transfer to accommodations Accommodations check in Lunch on own	Dr. Blum				
Evening	API health, safety and cultural orientation Free evening to settle in	Dr. Bramorski & Dr. Blum		1.0		1.0
Sunday, June 18	Day 2: Edinburgh		Lecture	Field	Lecture	Field
Morning	Meet Alexis for Public Transport Lesson into City Centre Walking tour of Edinburgh City Centre: The API Resident Director will guide the students and faculty around Edinburgh City Centre, going through Grassmarket, the Royal Mile, Old Town, part of New town and Prince's Street, and will end at Edinburgh Castle.	Dr. Blum		3.0		
Afternoon	Edinburgh Castle: One of Edinburgh's most iconic landmarks. Our visit will give us a chance to explore its old military jail, its Great Hall and even to see the Scottish crown jewels!	Dr. Blum		3.0		
Evening	API Welcome Dinner	Dr. Bramorski		1.0		
Monday, June 19	Day 3: Edinburgh		Lecture	Field	Lecture	Field
Morning	Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Class	Dr. Bramorski			4.0	
Evening	Dinner on own	Dr. Bramorski				

Tuesday, June 20	Day 4: Edinburgh		Lecture	Field	Lecture	Field
Morning	Faculty Led Classes	Dr. Blum	2.0			
Afternoon	Tour of Surgeon's Hall Museum	Dr. Blum		2.0		2.0
Evening	Dinner on own	Dr. Blum				
Wednesday, June 21	Day 5: Edinburgh		Lecture	Field	Lecture	Field
Morning	Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Class	Dr. Bramorski			4.0	
Evening	Dinner on own					
Thursday, June 22	Day 6: Edinburgh		Lecture	Field	Lecture	Field
Morning	Class	Dr. Bramorski			4.0	
Afternoon	Enlightenment and Age of Reason tour: The enlightenment in Edinburgh transformed philosophy, history, science and literature. From this small stage, a few men laid the foundations of modern economics, and inspired great leaps for modern medicine. But how did Scotland's capital gain its reputation as the Athens of the North? And what was it about the city that inspired so many thinkers?	Dr. Bramorski	1.0			
Evening	Dinner on own	Dr. Blum				
Friday, June 23	Day 7: Edinburgh		Lecture	Field	Lecture	Field
Morning	BCMB4030/6030	Dr. Blum		3.0		
Afternoon	The Edinburgh Genome Foundry (EGF) aims to manufacture genetic material on an unprecedented scale, using a fully automated robotic platform. The EGF will create and modify strands of DNA up to one million base-pairs long to equip cells or whole organisms with new or improved functionalities. Discover how the use of cutting edge synthetic DNA can solve real world problems. See how a genome lab works. Follow the journey of a spin out company and see how collaborations with academia helped them on their journey. Ask any burning questions you may have on starting your own spin-out company.	Dr. Bramorski			4.0	
3:30 - 6:30	BCMB4030/6030	Dr. Blum	1.0	2.0		
Saturday, June 24	Day 8: Edinburgh		Lecture	Field	Lecture	Field
Morning	Picked up for our trip to Glenkinchie Distillery In-depth, behind the scenes tour at Glenkinchie Distillery: Experience a distillery tour like no other. This tour will take us around the factory with an expert guide who will show us all the equipment and explain the process in great detail. Every Scotch has its own unique flavour and this can come down to the shape of the stills, the purity of the water, and so much more. We'll find out what makes the unique Glenkinchie flavour, and then we'll get to taste it for ourselves!	Dr. Blum				
Afternoon	Return to Edinburgh Lunch on own National Museum of Scotland: Our diverse collections will take you on a journey of discovery through the history of Scotland and around the world, taking in the wonders of nature, art, design and fashion and science and technology – all under one roof. Free time in City Centre until Ghost Tour	Dr. Bramorski				
Sunday, June 25	Day 9: Glasgow		Lecture	Field	Lecture	Field
Morning	Faculty Led Classes and Meet Alexis at Edinburgh Waverley Take the train to Glasgow	Dr. Blum		2.0		

Afternoon	Guided walking tour on the famous Glasgow Mural Trail: Join us for a walking tour of the amazing street art in Glasgow. Rain or shine we will walk the city centre so bring a jacket even in summer! Our tour will start in the heart of the city, and proceed through small alleys to discover hidden gems. We will cover over 20 large murals in the city, with scenic walks between them. We will pass some great historical landmarks and buildings on our route and I will also point out and discuss other key sights in the city as we pass them. We will stop at each mural and I will give brief overview of how this piece of art came about and why it is significant to the city. Local favourite spots for food and drinks will be highlighted as well, so take notes for later! Break for lunch and free time Guided tour at Tennet's Brewery: Go behind the scenes on the Tennent's Brewery Tour to discover the inner workings of Wellpark Brewery - home to over 450 years of brewing tradition and award winning beers, and enjoy a pint of the freshest Tennent's Lager on the house!	Dr. Bramorski				
Evening	Return on the train to Edinburgh and HWU	Dr. Bramorski				
Monday, June 26	Day 10: Edinburgh		Lecture	Field	Lecture	Field
Morning	GSK is a major pharmaceutical manufacturing facility in Irvine, Ayrshire, where its plant produces 2,500 tonnes of antibiotics every year. Learn about how GSK, Irvine manages its busy antibiotic manufacturing and production facility. Find out more about how GSK deals with health and safety, risk assessment, quality control and assurance, the complex infrastructure required to support their production schedules, fermentation techniques, downstream processing, product lifecycle management, supply chain management, antibiotic resistance and strain improvement processes.	Dr. Blum	3.0			
Afternoon	Field	Dr. Blum		4.0		
Evening	Return to HWU and Dinner on own	Dr. Bramorski				
Tuesday, June 27	Day 11: Edinburgh		Lecture	Field	Lecture	Field
Morning	Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Field	Dr. Blum		4.0		
Evening	Dinner on own					
Wednesday, June 28	Day 12: Edinburgh		Lecture	Field	Lecture	Field
Morning	Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Royal Botanical Gardens: The Royal Botanic Garden Edinburgh is one of the finest botanic gardens in the world. A pleasure for all the family, the Garden offers fantastic views of the capital's skyline, featuring Edinburgh Castle, and is located just a mile from the city centre. Visitors can discover its fascinating history, which dates back 300 years, learn about its plantings and walk around 70 acres of beautiful landscape.	Dr. Blum		4.0		
Evening	Dinner on own					
Thursday, June 29	Day 13: Edinburgh		Lecture	Field	Lecture	Field
Morning	Class	Dr. Bramorski			3.0	
	Meet at the Scotch Whisky Research Institute at HWU The Scotch Whisky Research Institute is the research and technical organisation for the Scotch whisky industry, charged with advancing product protection, sustainability, and process improvement in the sector. This half day event is intended to educate students on the whisky making process, active research in the whisky sector, and the application of IB in the valorisation of distilling co-products, including spent grain, pot ale, and carbon dioxide. Students will also have the opportunity to tour the SWRI analytical facilities as part of the event.	Dr. Bramorski				

10:30 - 12:30	Dinner on Own					
Friday, June 30	Day 14: Western Highlands Excursion		Lecture	Field	Lecture	Field
Morning	Head north into the Highlands. Stops include: Photostop at Doune Castle, a supply in Callander (the Gateway to the Highlands) to pick up sandwiches and snacks, and other stops include Balquidder for a hike and to see Rob Roy's Grave, as well as a brief stop to see Hamish the Coo! Lunch stop at Glencoe to see the incredible mountain chain the Three Sisters					
Afternoon	As we continue farther into the Highlands we'll stop at Glencoe Centre, Glenfinnan Viaduct (the Harry Potter Bridge), and our final stop will be in Fort William to get groceries for dinner and breakfasts during our weekend. Arrive into Stromeferry- Stromeferry is a small village about 30 minutes away from the bridge to the Isle of Skye.					
Evening	Overnight in Stromferry					
Saturday, July 01	Day 15: Stromferry		Lecture	Field	Lecture	Field
Morning	Depart Stromeferry for Isle of Skye We make a quick stop at the local co-op to get packed lunches and snacks for the whole day.					
Afternoon	We spend the entire day on the Isle of Skye, and make stops at various places, such as: Portree, Kilt Falls, Old Man of Storr - walk, Quiraing, Uig, Fairy Pools, and the incredible Fairy Glen.					
Evening	On the second night our host and guide, the fabulous Nory cooks Haggis, Neeps, and Tatties (Scotland's National Dish) for all the guests. Options are available for any dietary requirement, we get alternative meals for those unable to eat the main dish.					
Sunday, July 02	Day 16: Edinburgh		Lecture	Field	Lecture	Field
Morning	Depart Stromeferry for Eilean Donan Castle Stop off at Eilean Donan Castle					
Afternoon	Arrive Fort Augustus, lunch break and chance to jump in Loch Ness Cruise on Loch Ness Stop at the Pottery Cafe in Perthshire and at the Hermitage, a beautiful nature walk with an epic waterfall!					
Evening	Drop off students and faculty at accommodations in Edinburgh In for the night back in Edinburgh					
Monday, July 03	Day 17: Edinburgh		Lecture	Field	Lecture	Field
Morning	UGA Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Class	Dr. Bramorski			3.0	
Evening	Dinner on own	Dr. Bramorski				
Tuesday, July 04	Day 18: Edinburgh		Lecture	Field	Lecture	Field
Morning	UGA Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Fermentation Workshop with FlexBio at HWU	Dr. Bramorski			3.0	1.0
Evening	Dinner on own					
Wednesday, July 08	Day 19: Edinburgh		Lecture	Field	Lecture	Field
Morning	UGA Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Fermentation Workshop with FlexBio at HWU	Dr. Bramorski			3.0	
Evening	Local Health lecture	Dr. Bramorski				
Thursday, July 09	Day 20: Edinburgh		Lecture	Field	Lecture	Field
Morning	UGA Faculty Led Classes	Dr. Blum	3.0			
Afternoon	Fermentation Workshop with FlexBio at HWU	Dr. Blum		3.0		3.0

Evening	Dinner on own					
Friday, July 10	Day 21: Edinburgh		Lecture	Field	Lecture	Field
Morning	Presentations	Dr. Blum	4.0			
Afternoon	Presentations	Dr. Bramorski			4.0	
Evening	Ghillie Dhu 3-Course Dinner & Ceilidh: There is nothing more Scottish than a good ol' ceilidh, and none do it better than Ghillie Dhu. First we'll be given a traditional Scottish dinner, in 3 courses. After our bellies are full... the real fun begins! Put on your dancing shoes and get ready to twirl your heart out to live, traditional, Scottish music!					
Saturday, July 11	Day 22: Edinburgh to U.S.		Lecture	Field	Lecture	Field
All day	Transit to airport					

Total Hours	Total Lecture Hours	38.0		35.0	
	Total Field/ Lab Hours		32.0		7.0

Total Contact Hours	54.0	38.5
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Total Contact Hours = Total Lecture Hours + (Total Field Hours / 2)

Courses require 12.5 contact hours for each credit hour earned

Initial academic itineraries are understood to be tentative and subject to change. Please be as specific and accurate as possible.

For questions, please contact the Office of Curriculum Systems at csabroad@uga.edu or 706-542-6358.