

McMaster University

Ontario Universities Program in Field Biology

Course Title:	Subtropical Ecology: Biodiversity and Its Sustainable Utilization in China
Instructor(s):	Jianping (J-P) Xu (McMaster, 905-525-9140 Ext. 27934, jpxu@mcmaster.ca)
Dates:	May 10-24, 2026
Location:	Western Zhejiang province, including Changshan County and Gutian Mountain Nature Reserve. They are all within 200km radius of each other
Cost:	<p>\$2,250 [\$350 deposit to McMaster University at time of registration; \$1,900 balance due April 30th, 2026]. The fee covers: transportation within western Zhejiang province, food, lodging, experimental supplies, and park entries, during the entire two weeks of the module from May 10-24, 2026.</p> <p>The fee does not cover tuition at home university nor transportation to Changshan (to be arranged by student, but we can help)</p>
Prerequisites:	Students should be finished with one year of university education and should have taken at least one course in general biology. Students should be prepared for moderately strenuous hikes and outdoor activities.
Enrolment*:	10 minimum/20 maximum students [(20 (10): max enrollment of 20; max of 10 for McMaster]
Course Description (brief):	<p>This course has three broad objectives: (a) to gain a first-hand experience and understanding of biodiversity in subtropical ecosystems; (b) to learn and evaluate ecosystem functions and services; and (iii) to have hands-on experience on how biowastes can be effectively used to produce valuable goods such as exotic mushrooms. To achieve the first objective, students will be exposed to the diversity of ecological niches in the subtropics, and the diversity of plants, insects, birds, fish, and fungi. To achieve the second objective, we will use a mixed approach of literature presentations, surveys and field observations, and problem-based learning (PBL) to understand biodiversity assessment, the use of biodiversity by the indigenous people, the threats that the biodiversity faces, and how best to maintain their sustainable utilizations. To achieve the third objective, all students will learn how to grow exotic mushrooms such as Lion's Mane and Morel. A series of papers relevant to this course will be distributed to students by the end of March 2026 to familiarize students with the background and issues to be discussed. In addition, we will provide a list of available resources and potential topics to help each student develop a draft research proposal before the trip.</p>
Evaluation:	<p>Consists of the following: (i) A draft ideas/research proposal (10%); (ii) An individual presentation on a paper related to biodiversity and subtropical ecosystem (10%); (iii) Field journal and field records (completeness 5%, neatness and readability 5%, accuracy and scientific value 10%; creativity, application and reflection 10%); (iv) Participation of field work and discussions (15%). (v) A final report based on the field survey data or exotic mushroom production (35%).</p>

An Average Day – What to Expect

(a) Daily timeline	An average work day may look like this: 7:30 breakfast, 8:30 field work rain or shine, 12:00 lunch break, 1:00-4:00pm continuing field work, 4:00-6:00pm class lectures and log books updates; 6:00 dinner, 8:00-9:30pm, student presentations.
(b) Work habitat & Physical exertion	We may walk up to about 10km per day along mostly trails, some of the trails are along steep rocky slopes. There will be water breaks and substantial rest periods to do surveys.
(c) Common activities	Activities: hiking, surveying, class lectures and presentations Associated risks: twisted ankles, fatigue, blisters from poor footwear, heat exhaustion
(d) Weather, dehydration, & biting insects	Weather conditions likely to be encountered: min./max. temp of 15-35°C. There is potential for strong mid-day sun, high UV, high humidity, heavy rain, and high winds etc. Mosquitoes and house flies may be common in certain areas. Rain gear and insect repellent will be provided.
(e) Toxic/poisonous, wildlife/ plants	May encounter poisonous snakes
(f) Sleeping, washroom & laundry facilities	Sleeping accommodations: student dorms (up to four in a room and gender specific), no heating/AC, all sleeping gear provided Washroom facilities: may encounter sitting toilets or squat pots at different times, toilet paper provided, private showers and hot water are available, shampoos will be provided Washing/laundry facilities will be available
(g) Meal plans & food allergies	All meals will be provided. However, the selection of food may be limited at times. Vegetarian option available. The locals are known to eat spicy food.
(h) Non-academic responsibilities	Students are responsible for keeping their own dorms/washrooms clean (cleaning supplies provided)
(i) Degree of isolation	Though geographically isolated sometimes, we will have daily access to electricity, wi-fi, and small convenience stores. Please bring electrical outlet adaptors for your electronics. Medical support is available within ~1.5hour drive at any giving time.
(j) Alcohol & drugs	Alcohol (beer) is permitted on-site during meals and evening discussions. Drugs are prohibited.
(k) Vaccinations/ Insurances	There is no travel advisory for Canadians in Zhejiang. However, as a general precaution, students should have vaccines for TB and Hepatitis B and purchase general overseas' travel and health insurance.
(l) Social Situations	This is a remote area, and many locals may not have seen any foreigner. If you are a visible minority visiting China, you may occasionally become an object of curiosity in this region. Don't be scared, smiling and saying hello is usually sufficient to fend off their curiosity. Students should be respectful of each other and be considerate. I will share some social etiquette after registrations are in.
(m) Final comments	The concerns mentioned above have not caused any serious problem for any student during the last five editions of this course. Overall, students have reported that the course provides a great opportunity for personal growth, making new friends with like-mind, unique experiential opportunities to see a different country and culture, and learning about subtropical biodiversity and its utilization.