



Mountain and Medicine Health and the Environment in the Himalayas

May 8 – 17, 2019, ANTH 1797

Instructor: Akshay Shah



COURSE DESCRIPTION

The Himalayan range, which extends across northern India and Pakistan, southern Tibet, and the countries of Nepal and Bhutan, has the world's highest mountains and a fragile environment threatened by climate change and large-scale development projects. 53 million people live in the Himalayas, where the economy is determined by topography and geography in relation to subsistence agriculture and forest resources. All the major rivers in South and Southeast Asia drain from the Himalayan range, illustrating the dependency of low laying agricultural regions and major urban centers on this critical and fragile ecological zone. Although threatened by many factors, including the construction of roads and dams, the Himalaya are comprised of extensive forested mountains and rich tributary river valleys many of which are remote. Generally considered to be underdeveloped, many isolated towns and villages in the Himalaya do not have ready access to adequate medical infrastructure or public health facilities. Focusing on geography and the environment, this course provides an overview of the economic conditions that shape public health and medicine in the mountains of northern India

ACADEMIC FOCUS

Public health is defined by social, cultural, economic and political factors that establish the parameters of risk for chronic and contagious diseases as well as morbidity. Environmental





factors also play a critical role. This course focuses on the Himalayan environment as a key factor that structures social, cultural and economic life to produce a unique public health scenario.

CLASS SCHEDULE

Date	Day	Topic	Location	
8-May	1	Geology and Geography	Hanifl	4 hours
9-May	2	Flora and Fauna	Hanifl	4 hours
10-May	3	Village Communities	Hanifl	4 hours
11-May	4	Forest Resources, Economy and Health	Nag Tibba	Trek 24/7
12-May	5	Roads, Infrastructure and Medicine	Nag Tibba	Trek 24/7
13-May	6	Village Medical Care	Nag Tibba	Trek 24/7
14-May	7	Rest Day	Hanifl	
15-May	8	Urbanization, Tourism and Pilgrimage	Hanifl	4 hours
16-May	9	Dams and Development	Hanifl	4 hours
17-May	10	Overview	Hanifl	4 hours

SOURCE BOOKS AND READING ASSIGNMENTS

David Zurick, Julsun Pacheco, Basanta Raj Shrestha, Birendra Bajracharya, (2006) Illustrated Atlas of the Himalaya. Lexington: University of Kentucky Press. (Background)

Michael Benanav (2015) Himalaya Bound: An American's Journey with Nomads in North India. New York: Harper Collins. (Background and Context)

One or two concise essays will be assigned for students to read before each class. These will be selected by the instructor and made available electronically. The essays will provide critical insight on specific topics and problems based on published academic research.

Reading Assignments

Day 1: The Nutritional Status of Indigenous People in the Garhwal Himalayas, India Author(s): Anuradha Dutta and Kiran Pant Source: *Mountain Research and Development*, Vol. 23, No. 3 (Aug., 2003), pp. 278-283

Day 2: The Two Cultures Revisited: The Environment-Development Debate in India, Ramesh Jaiaram, *Economic and Political Weekly*, Vol. 45, No. 42 (2010), pp. 13-16





- **Day 3:** Attitudes Toward Resolution of Human—Wildlife Conflict Among Forest-Dependent Agriculturalists Near Rajaji National Park, India, Monica Ogra, *Human Ecology*, Vol. 37, No. 2 (2009), pp. 161-177
- **Day 4:** Ritual Healing and mental health in India. William Sax, *Transcultural Psychiatry*. (2014), Vol. 51(6) 829–849
- **Day 5:** Managing Ecosystems for Women's Health and Sustainable Development: An Illustration from the Kumaon, Uttaranchal Ratna M. Sudarshan *Indian Journal of Gender Studies* 8(2): 207-222.
- **Day 6:** Ethnomedicinal plants used by local inhabitants of Jakholi block, Rudraprayag district, western Himalaya, India, Ankit Singh, Mohan C. Nautiyal, Ripu M. Kunwar, and Rainer W. Bussmann, *Journal of Ethnobiology and Ethnomedicine* (2017) 13: 49-60
- **Day 7:** Folk Medicinal Practices in Kangra District of Himachal Pradesh, Western Himalaya Sanjay Kr. Uniyal & Varun Sharma & Pankaj Jamwal, *Hum Ecol* (2011) 39: 479–488
- **Day 8:** Pastoralism in Transition: Livestock Abundance and Herd Composition in Spiti, Trans-Himalaya, Rashmi Singh & Rishi Kumar Sharma & Suresh Babu, *Hum Ecol* (2015) 43:799–810.
- **Day 9:** Where Have All the Young Men Gone?: Social Fragmentation during Rapid Neoliberal Development in Nepal's Himalayas. Sanders, Catherine and McKay, Kimber Haddix, *Human Organization* Spring (2014) 73: 1-37

COURSE REQUIREMENTS AND FORMAT

This is an intensive course for students enrolled in the Pitt/Hanifl Summer Program. The course runs for ten consecutive days, four hours of dedicated course-work and classroom instruction per day, with a three-day field expedition trek on days 4, 5, 6 and a rest/study day on day 7.

Hanifl Meetings - Days 1,2,3,7,8,9,10

Class meetings at the Hanifl Center will run for 4 hours each day, divided into 4, 1-hour blocks. Each block will be dedicated to a different mode of instruction:

- Hour 1 Lecture (50 min)
- Hour 2 Discussion with Guest Specialists (50 min)
- Hour 3 Film or Experiential Learning
- Hour 4 Discussion of Assigned Readings





Since the Hanifl Center is located within easy walking distance of Jabberkhet Nature Reserve (JNR) and a number of communities that represent Himalayan geography, demography and economy – Dhobi Ghat, Landour, Jabbarkhet -- several blocks of class time will be dedicated to experiential learning in these environments. Hours 3 and 4 will be combined so that discussion of relevant reading assignments can be conducted in conjunction with outdoor activities at JNR, Jabbarkhet and in Landour.

Nag Tibba – Day 4,5,6

Instruction during the trek will be structured to take advantage of field experiences and opportunities focusing on wildlife, villages, transportation, forest resources, and agriculture. Students will trek through the Aglar river valley, through Thathur, a small market town, and then past a number of increasingly isolated villages, to the top of Nag Tibba, a mountain in the mid-Himalayan zone. The trek is for three days covering a distance of 50 km, starting from the Hanifl Center at 1600 meters, descending to 700 meters at Thathur (by bus) before ascending to the peak of Nag Tibba at 3000 meters.

ASSIGNMENTS

Journal – Students will keep a journal using the following questions as prompts for entries for each of the ten days. Journals are due for evaluation on May 11th. Journal entries should reflect engagement with course material and critical reflection on field experiences. 30% of final grade.

- 1) Identify three health risks associated with the Himalayan environment?
- 2) What is the relationship between health and ecology in the Himalaya?
- 3) What factors influence health for people living in Himalayan villages?
- 4) What public health issues are associated with subsistence agriculture and the use of forest resources.
- 5) What impact does the construction of roads have on people living in the Himalayas? What are the health benefits of roads? What are the disadvantages?
- 6) Understanding the problem of isolation and transportation, what would be a feasible way to institutionalize medical care in remote villages.
- 7) What are the health risks associated with urbanization, tourism and pilgrimage in the Himalayas?
- 8) What are the advantages and disadvantages of building dams on rivers in the Himalayas? What should be done to minimize the environmental impact of dams while increasing the benefits for people living in villages?

Essay - Write a 3000-word essay engaging with one of the questions identified above. The essay is due at the end of the program, June 7th. 50% of final grade.





Grading

Class Attendance and Participation – 20% Journal Entry – 30% Final Essay – 50%

Total - 100%

Grading Scale

A+	98–100	C+	78–80
A	94–97	C	74–77
A-	90–93	C-	70–73
B+	87–89	D	66–69
В	84–86	F	0-65
B-	81–83		

University of Pittsburgh Policies and Stipulations

Office Hours: The posting of office hours on the office door is University policy, and the responsibility of the faculty member as a courtesy and convenience to students. (Source: www.pitt.edu/~provost/ch3_off_hrs.htm). Most administrative offices are open from 8:30 a.m. to 5:00 p.m., Monday through Friday. A few offices, such as the College of General Studies, have extended hours. In addition, according to the Academic Integrity Guidelines, under I. Faculty Obligations, Point 2, faculty are "To be available at reasonable times for appointments with students, and to keep such appointments." (Source: www.as.pitt.edu/faculty/policy/integrity.html)

Disability Resource Services: If you have a disability for which you are or may be requesting an accommodation, you are encouraged to contact both your instructor and the Office of Disability Resources and Services, 140 William Pitt Union, 412-648-7890, as early as possible in the term. Disability Resources and Services will verify your disability and determine reasonable accommodations for this course.

Academic Integrity Policy; Cheating/plagiarism will not be tolerated. Students suspected of violating the University of Pittsburgh Policy on Academic Integrity, noted below, will be required to participate in the outlined procedural process as initiated by the instructor. A minimum sanction of a zero score for the quiz, exam or paper will be imposed. (For the full Academic Integrity policy, go to www.provost.pitt.edu/info/ai1.html.)





E-mail Communication Policy Each student is issued a University e-mail address

(username@pitt.edu) upon admittance. This e-mail address may be used by the University for official communication with students. Students are expected to read e-mail sent to this account on a regular basis. Failure to read and react to University communications in a timely manner does not absolve the student from knowing and complying with the content of the communications. The University provides an e-mail forwarding service that allows students to read their e-mail via other service providers (e.g., Hotmail, AOL, Yahoo). Students that choose to forward their e-mail from their pitt.edu address to another address do so at their own risk. If e-mail is lost as a result of forwarding, it does not absolve the student from responding to official communications sent to their University e-mail address. To forward e-mail sent to your University account, go to http://accounts.pitt.edu, log into your account, click on Edit Forwarding Addresses, and follow the instructions on the page: Be sure to log out of your account when you have finished. (For the full E-mail Communication Policy, go to www.bc.pitt.edu/policies/policy/09/09-10-01.html.)

