

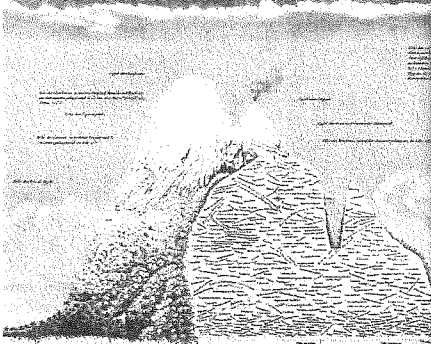
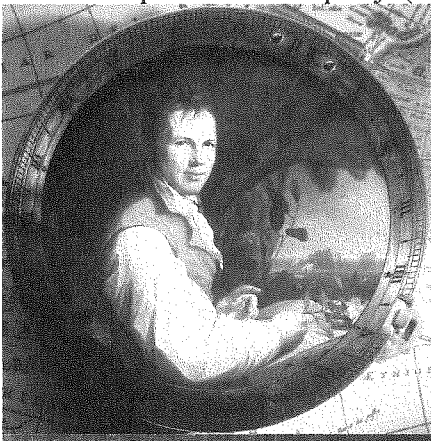
Sophomore Inquiry (SINQ) Course – Winter, 2014 (“Interpreting the Past” Cluster)

ORIGINS OF SUSTAINABLE ENVIRONMENTALISM: IN THE FOOTSTEPS OF ALEXANDER VON HUMBOLDT – EXPLORER, SCIENTIST, HUMAN RIGHTS ADVOCATE

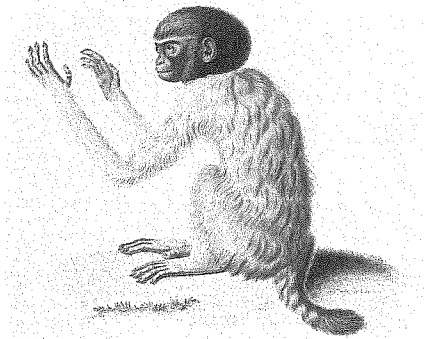
William B. Fischer, Ph.D. (Department of World Languages & Literatures)

CRN 44078 UNST 236A 001 • 4 credits • TR 14:00-15:15 • Cramer Hall 103
(with Mentored Inquiry Workshops & field trips)

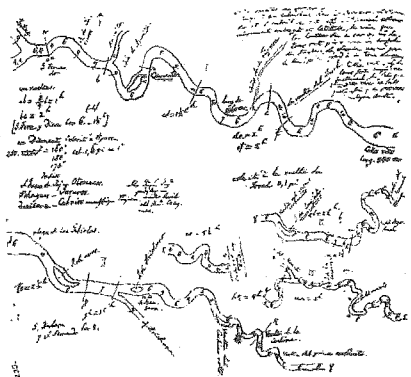
for more information: William B. Fischer • 503 725-5285 • fischerw@pdx.edu
web.pdx.edu/~fischerw (links: “Personal Info” & “Humboldt Project Website”)



Profile of Chimborazo, showing the location of different plants at different altitudes – an original pencil representation of Humboldt's creation on the geography of Peru.



Viverra zibethica



I. Rio Neaz sketches from Humboldt's diary, part IV (diary of the navigation on the rivers Apurí, Orinoco, Casiquiare and Rio Negro), German State Library, Berlin

Subject of inquiry

The explorations, scientific research, sociological studies, and ethical thought of Alexander von Humboldt (1769-1859) established the principle of interconnectedness – of our planet, its life forms, its natural resources, and its societies. Humboldt was probably the most famous cultural figure of Nineteenth-Century Europe, and was widely known in the United States. After a century of obscurity, he is being rediscovered and recognized as both a heroic explorer and a giant in many fields of endeavor: climate research, plant and animal geography, environmental studies, anthropology, linguistics, and social justice. Humboldt's work was a major factor in not only modern sustainable environmentalism, but also how the United States developed as an ecology and a society. Counties, towns, schools, universities, geographical features, biological species and, of course the Humboldt Current and the Humboldt Penguin, commemorate his name.

Course goals

- Trace the origins of sustainable environmentalism in the Nineteenth Century.
- Follow an explorer and scientist of the Nineteenth Century whose work covered the range of the sciences and extended into the social sciences and humanities.
- Relate Humboldt's work and world to our world, especially environmentalism.
- See how knowledge (including our own) is mediated by modes of perception and communication.
- Understand that history and human development are process, not product, and not perfection.
- Learn by helping others to learn: create Humboldt-related learning modules (“Earth Day with Alex”) for K-12 schools named for him (US, Latin America, Europe)

Method: combination of academic study, hands-on (“experiential”) learning, service learning, and carefully structured team-based learning with individual responsibility.

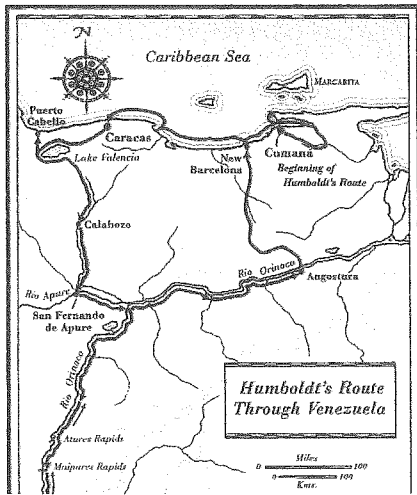
Campus-Wide Learning Outcomes addressed: Sustainability, Creative and Critical Thinking, Internationalization, Engagement, Communication (including quantitative), Diversity

Units of inquiry & exploration

Leaving Home • Loading the Boats • The Lands, Then and Now • The Animals (and the People) • The Plants • Rocks & Soil • Weather & Water • Stars & Numbers • The Societies & the Outlooks • Languages, Races, Peoples

Selected activities

Inventory of Skills (experiences, interests, communicating, presenting) • Replicate Humboldt's Research Activities (make your own sextant from a CD and some Lego blocks) • Create a Learning Module • Writing / Speaking in Various Modes (reflective, descriptive, narrative) • In-depth Study of a Humboldt Contemporary • In-depth Study of a Humboldt-named Species (the penguin? the squid? the rare plant on Oahu?) • Learn about a Humboldt-named school • Plan a Humboldt-Themed Learning Garden • maybe swamp (SINQ!) a canoe (appreciate what Humboldt endured, practice numeracy skills)



This SINQ course combines a rigorous scholarly approach with engaged learning that should appeal to participants with varied interests and learning styles. We will use original sources and a recent biography to follow Humboldt's travels through Central and South America in the early 19th Century. We will see how his explorations and research had an immense effect on both scientists and the general public, in America as well as Europe. We will examine the later impact of Humboldt on land and water use in the American West. And we will see how his work relates to the visual arts, philosophy, and literature.

Required Texts (all available both as print and e-books):

Helfrich, Gerard. *Humboldt's Cosmos: Alexander von Humboldt and the Latin American Journey That Changed the Way We See the World*.

Humboldt, Alexander. *Jaguars and Fels*. Translated by Jason Wilson. London: Penguin, 1995/2007.

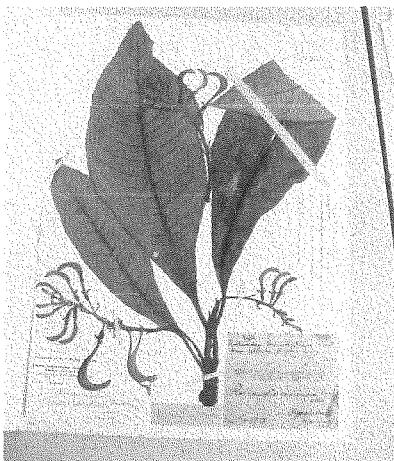
Stegner, Wallace. *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West*



But we will also take a "hands-on" approach. We will replicate some of Humboldt's experiences in his travels and activities in his research. We may get a little wet as we see how many students or instructors, or boxes of scientific instruments and specimens, it takes to load a canoe close to SINQing (unless someone in the group has the math skills to figure that out for us – or, better, teach us to do that for ourselves). We'll learn how to use scientific instruments like those that Humboldt worked with. You may find yourself building a sextant from household items and learning how to determine your latitude by "shooting the sun". We'll try our hands at mapping, at sketching, at writing in the forms that Humboldt used: careful description of life-forms, narration of our travels, expression of ecological vision, advocacy of equity.

For a list of schools worldwide that are named for Humboldt, go to:

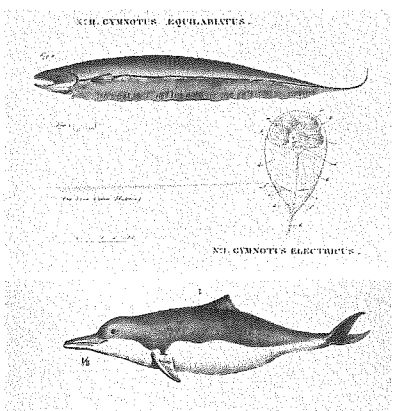
http://web.pdx.edu/~fischerw/proj_pub/humboldt_project/index.html



"Hands-on" will have another meaning, and we'll give another twist to "inquiry". The best way to learn something is to teach it, and PSU means "let knowledge serve the city" (or the country, or the world). So we will help others learn: the learners at the many schools in North, Central, and South America that are named for Humboldt. We will create model learning modules that will help those young learners improve their learning by inquiring about the person whose life and work caused his name to be given to their schools. An example: kits ("Humboldt expedition boxes") of materials about sustainability that would help Portland's own Humboldt Elementary School, or the elementary, middle and high schools named for him in Nevada, Illinois, Nebraska, New York – or Montreal, Mexico, and Mannheim – celebrate "Earth Day with Alex" this next April, maybe with their own Humboldt-themed learning gardens, or projects that explore *Cyanea humboldtiana*, a Humboldt-named species in Hawaii that is on the Endangered Species list.

For a list of species that are named for Humboldt, go to:

http://web.pdx.edu/~fischerw/proj_pub/humboldt_project/index.html



Beyond the usual "academic" skills and motivation, what you'll need for this course (or may acquire by taking it) are: willingness to work in groups as well as alone, and to offer the many skills you may have that might not emerge in a more conventional course. Can you draw, take high-quality photographs, or handle graphics software? interact well with younger learners? create a garden? find North during the day? organize a team? plan a grant proposal? perform an indigenous folksong, dance, or craft? help us with statistics, geometry, or trigonometry? steer a canoe? handle some Spanish, French, German, an indigenous American language, or maybe even Latin or Greek? contribute a knowledge of edible plants, environmentally sound food supply, or biological classification? offer some knowledge of environmentalism? go up a climbing wall with one hand while measuring atmosphere pressure with a barometer in the other? read a vernier scale? We'll find out your talents early on, because we'll need them. Humboldt had most of that skill set, and a whole lot more. We'll be OK if we can field a group that can do most of that collectively.

About the "Humboldt" SINQ

last modified: 1/5/14

UNST 236A Section 001 CRN 44078: Interpreting the Past Cluster • Course description and poster

Instructor: William B. Fischer, Ph.D., Department of World Languages & Literatures, Portland State University • website • email (fischerw@pdx.edu) • office: 451-D • tel: 503 725-5285 • weekly schedule

SINQ Mentor: Lola Aminova (email: laminova@pdx.edu)

Main Meeting: TR 14:00-15:15 CH (Cramer Hall) 103

Workshops (UNST 236B): T 1300-1350 (section 001 CRN 44079, location CH 159); R 1300-1350 (section 002 CRN 44080, location CH 159); T 1200-1250 (section 003 CRN 44081, location CH 159);

Final exam: Tuesday, March 18, 1530-1720

Deadline for final assignments & projects: Friday, March 21, 1700, Pacific Time (paper or electronic)

NOTE: This website is the ONE AND ONLY course website for this course. We do NOT use D2L.

Subject of inquiry:

The explorations, scientific research, sociological studies, and ethical thought of Alexander von Humboldt (1769-1859) established the principle of interconnectedness – of our planet, its life forms, its natural resources, and its societies. Humboldt was probably the most famous cultural figure of Nineteenth-Century Europe, and was widely known in the United States. After a century of obscurity, he is being rediscovered and recognized – and reinterpreted! – as both a heroic explorer and a giant in many fields of endeavor: climate research, plant and animal geography, environmental studies, anthropology, linguistics, and social justice. Humboldt's work was a major factor in not only modern sustainable environmentalism, but also how the United States developed as an ecology and a society. Counties, towns, schools, universities, geographical features, biological species and, of course, the Humboldt Current, commemorate his name.

Course Goals;

- Trace the origins of sustainable environmentalism in the Nineteenth Century.
- Follow an explorer and scientist of the Nineteenth Century whose work covered the range of the sciences and extended into the social sciences and humanities.
- Relate Humboldt's work and world to our world, especially environmentalism, with particular attention to how early observers began gathering the climate data that is the baseline for the contentious discussion of climate change in our own time.
- See how knowledge (including our own) is mediated by modes of perception and communication.
- Understand that history and human development are process, not product, and not perfection.
- Learn by helping others to learn: create Humboldt-related learning modules ("Earth Day with Alex") for K-12 schools named for him (US, Latin America, Europe)

Method: combination of academic study, hands-on ("experiential") learning, service learning, and carefully structured team-based learning with individual responsibility.

Campus-Wide Learning Outcomes addressed: Sustainability, Creative and Critical Thinking, Internationalization, Engagement, Communication (including quantitative), Diversity Topics:

Week 1: Leaving home: pictures, visions, dreams
Week 2: Boats, roads & paths, legs & arms

Week 3: Lands, climates & peoples - then and now

Week 4: Plants

Week 5: Animals

Week 6: Rocks & soil

Week 7: Weather & water

Week 8: Stars & numbers

Week 9: Societies & outlooks

Week 10: Languages, races peoples

Final week: Coming home: projects, projects, prospects: The languages, societies, cultures, peoples, races, species

Activities:

In the classroom: 2/3 lecture and discussion, 1/3 hands-on learning & group projects

Outside the classroom: 1/3 reading, 1/3 writing, 1/3 hands-on learning & group projects

The course meets 4 hours a week. The common principle is to study 2 hours outside class for each classroom hour. So you should budget 8 hours of study time per week, as a minimum. If the results are unsatisfactory, especially to you, be ready to add some additional study time, especially for consultation with the instructor and mentor.

Reading. The main texts (link to details for getting them) are: 1) *Humboldt's Cosmos: Alexander von Humboldt and the Latin American Journey That Changed the Way We See the World*, by Gerard Helferich; 2) *Jaguars and Electric Eels*, a much shortened version of Humboldt's own *Personal Narrative of a Journey to the Equinoctial Regions of the New Continent*; 3) *Beyond the Hundredth Meridian: John Wesley Powell and the Second Opening of the West*, by Wallace Stegner. You'll be reading *Humboldt's Cosmos* and *Jaguars/Eels* slowly but steadily during the first half of the course. You'll start *Beyond the Hundredth Meridian* a few weeks into the course. Additional assigned reading will include short articles, background information for your individual and group projects, and, for your book report, a book that relates both to Humboldt and to a special interest of your own. Readings are NOT stocked at the PSU bookstore. You will acquire them by ordering print-on-paper texts, by using PSU access to journal and library resources, or by downloading electronic versions, including some at no cost.

Why these texts? *Humboldt's Cosmos* provides the "backbone" of the course: a narration of Humboldt's life and discussion of his work in sufficient depth that you can then understand his significance and join in the discussion of what he and his work mean for us in the present: interpreting the past. *Jaguars and Electric Eels* gives us the sense of immediacy, the feeling of being right there with Humboldt, that we need to grasp how different, how dangerous, and how heroic his travels and research were. *Beyond the Hundredth Meridian* is your chief (but not only) means to explore a particular dimension of Humboldt as it relates to our own time and its environmental and cultural issues: land and water allocation and use in the American West. Lastly, the book about which you will write a review (not just the usual "book report") will be selected to exploit and strengthen one of your own particular interests (travel, arts, an area of science, cooking, ?).

Grading proportions:

20% weekly writing assignments

10% Humboldt-based species description, learning module, or similar contribution to long-term group/ course project

10% book review

10% group project

10% participation in classroom discussions and activities

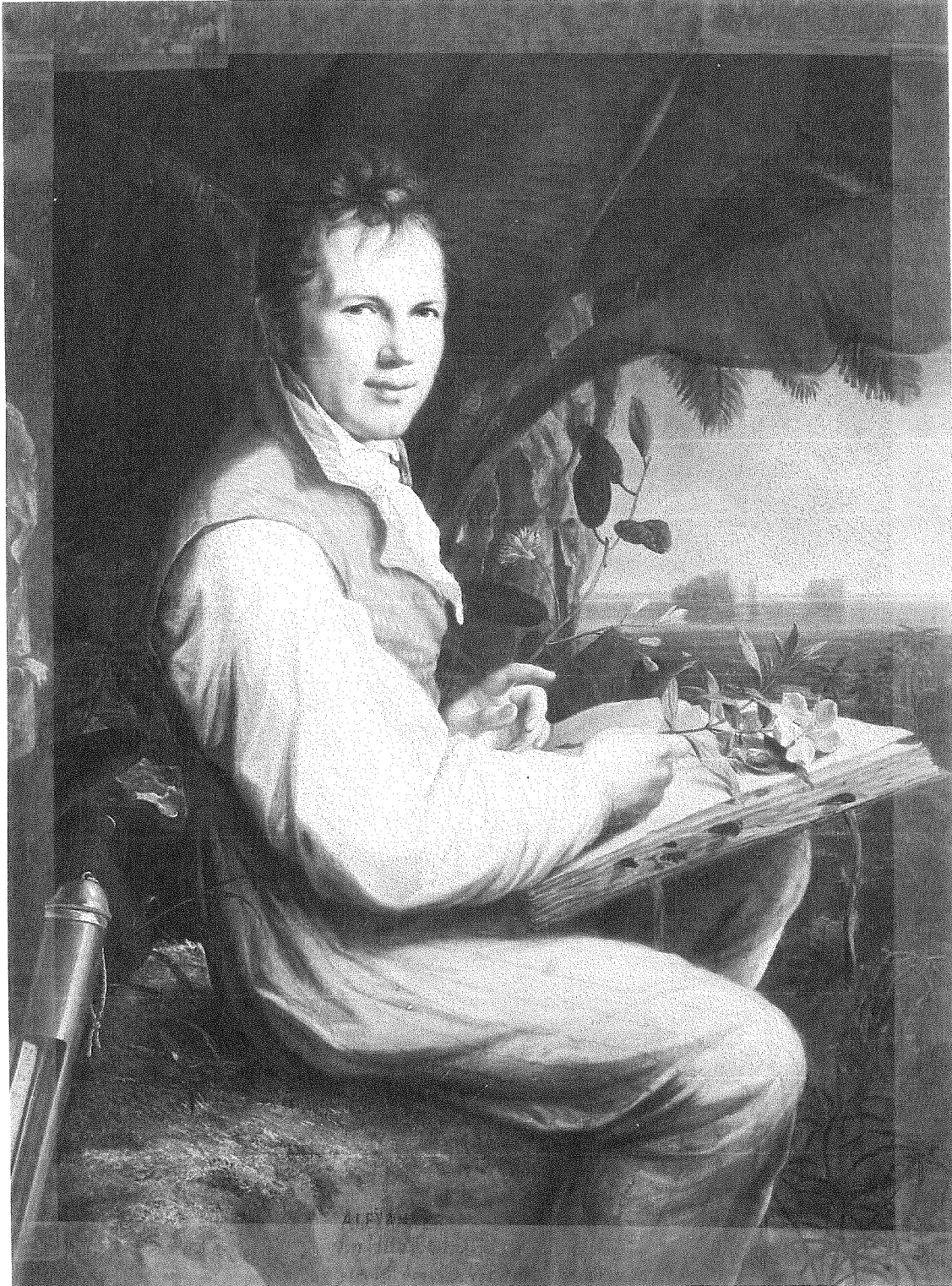
20% mentor's evaluation of workshop activities

10% midterm exam

10% final exam and self-evaluation

Grading is based on scoring guides with objective standards and performance descriptors, including an "on-time" factor. There is NO CURVE. There is no separate penalty for missed meetings of the main class, but no credit will be given for activities conducted during those meetings. The SINQ mentor may assess a penalty for missing meetings of the workshops. Requests for makeups and extensions must include documentation of reasons and proposal for how and when the work will be completed. Access policy: standard PSU provisions.

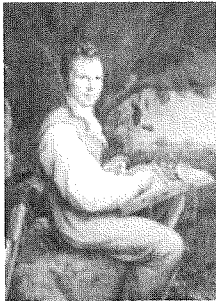
Unless announced otherwise, all assignments, except the group project, may be revised for regrading. Revisions must be turned in a week after you receive the original version back from instructor/mentor. An improved grade is likely but is not guaranteed.



Meeting 1 • 7 January 2014 • Tuesday
Week 1: Leaving home: pictures, visions, dreams

Version:
1/3/14

picture of the week



Humboldt, 1806, by
Friedrich Georg Weitsch
(1758-1828) [0070]
click on image to see full-
size graphic

thought-bite of the week:

"Everything is interrelated. I must find out about the unity of nature."

(Helferich epigraph; Walls, 36)

mini-text of the week (start):

"From my earliest days I felt the urge to travel to distant lands seldom visited by Europeans... "

Humboldt, "Personal Narrative" ([read more](#))

Materials for today

course poster; course goals; overview of schedule; intake questionnaires (experiences; skills); Helferich, Humboldt & Stegner (e-)books; other books and resources related to the course; room plan for name sign-in; mug shots

Topics for today (key to symbols)

	(5') Brief course introduction & personal introductions, with icebreaker (small groups, then plenary): When did you take the biggest trip of your life? What do you mean by "big"?
	(10') Course overview: Our organizing principle is sustainability (Environment, Economy, Equity). Focuses: Humboldt himself; the Nineteenth Century; sciences, humanities, social sciences; America & the world (especially Europe), past & present. (Re-)interpreting the past: It was different Then and There, it is different There and Now (and There can include elsewhere within our own society). Discussion of current controversial issues is welcome, but need to stay on the main theme as expressed in the course title. Active participation and teamwork necessary. How to get a B: participate actively in classes and mentor workshop, and do all the reading (prove it!) and assignments at the performance level "sufficient". How to get an A: AmAze me. Specific activities, assignments and grades.
	(5') Thought-bite of the week (see above): "Everything is interrelated." Do you believe it? Do you believe others believe it? What do you and others mean by "interrelated" and "unity of nature"? "Nature"? Where do you and others "find out" about that unity? How does this relate to sustainability?
	(20') Biographical sketch of Humboldt and his work (Wikipedia). The course website (you're on it), the Humboldt Project website, short description of other resources. Our main print resource: The Helferich biography; get it and the other main texts right away: Help with getting texts.
	(5') Importance of teamwork and, whether during group or individual work, recognizing and then bringing forth your individual experiences and skills. Short example: You think you may have taken a course that relates to our course. Find someone else who has taken that or a

	similar course; report back.
	(15') Intake questionnaire (<i>experiences</i>) with writing sample, possibly with partner interview; label seating and take pictures
	(15') Announcements, Checkups, & Previews: 1) mentor workshops and next class meeting; 2) see <i>schedule</i> for reading and writing assignments. Note that schedule is being revised from last year's schedule in a "rolling manner", with meeting links posted as they come up. 3) Reminder: Keep your meeting handouts - maybe punch them and put them in a binder. You can also print the meeting notes from the links to the meetings on the <i>schedule</i> page of the course website. Where a handout includes extra material added to the printout of the meeting's web page, you'll see an additional link ("supplementary materials") along with the link to that meeting's web page.

"Humboldt SINQ" 2014 Winter Quarter Schedule & Assignments

last modified: 1/6/14

Choose week ▾

Click on the Meeting # / date / day to go to the detailed class plan for that meeting. Use "Choose week" button at left to move quickly down the page.

Italic bold text like this = comments after the meeting

Reading is to be done in time for the Tuesday class of the following week.

Fischer assignments & deadlines • Aminova assignments & deadlines (link to come)

Week 1: Leaving home: pictures, visions, dreams	
#01 • 07 January, Tuesday supplementary materials	<ul style="list-style-type: none"> • Our topic, our course. Main points: understanding the past; re-tracing Humboldt's experiences and research; (re)interpreting the past (for ourselves, for others); tapping into tacit knowledge; staying on (or at least near) the main topic (especially: including wide range of opinions about environmental issues but maintaining main focus on how collection of data about climate change began); notions/ definitions of "sustainability" and "sustainable environmentalism". • The course "about" page and poster/ course description: goals, objectives, schedule, activities, resources, results, standards. • Intake experiences questionnaire (with partner/ group discussion): life experiences relevant to this SINQ. • Mentor's role in the course. • Names (on seating chart) & photos. • Initial assignments
Preparation for next meeting	<ul style="list-style-type: none"> • Do this first item as preparation for every Thursday meeting: (Re)read the thought-bite and mini-text of the week, from the Tuesday meeting. They are usually taken from Humboldt, <i>Jaguars and Eels</i>. Reflect about how Humboldt and his life compare to you and your life, and to our topic of sustainable environmentalism. Thursday classes will often start with a group discussion of these quotations. • Read Amazon blurb for fast take on Helferich biography of Humboldt. • Read Wikipedia (English version) about Humboldt - concentrate on the early part of his life and the pictures. • Take at least 15 minutes to explore the Humboldt Project website. Follow particularly these links on the opener screen: "about the Project", "Humboldt-named schools worldwide", "named for Humboldt", and "grant possibilities". • Optional/ Enrichment: compare the Spanish Wikipedia article about Humboldt to the English version. The German and French versions also differ - every group and time has "its" Humboldt, and French and Spanish were important languages in Humboldt's world, his own work, and his effect on the world, and are so even today. The difference among Wikipedia articles also reminds us to think critically about the sources we use and believe, whether they are printed or on the internet.
#02 • 09 January supplementary materials	(no separate web page): "Humboldt's World – Our World", by guest presenter Prof. Steven Fuller. <ul style="list-style-type: none"> • Course mentor time for general announcements and issues • Writing sample, done in class (<20'): What Do You See in the Iconic Portrait of Humboldt?
Mentor workshops	Followup discussion: main features of the course; bureaucratcs & mechanics. Intake experiences questionnaire (with partner/ group discussion): life

after this meeting	experiences relevant to this SINQ. Skills inventory I (specific skills related to this SINQ). Discussion of first reading assignments and explanation of standing assignment related to core readings. Course/Mentor standards & grading. Help with getting texts.
Preparation for next week - do by Tuesday	<ul style="list-style-type: none"> Follow this link for directions about ordering your copies of the three main texts, and deciding whether you will use ink-on-paper or electronic versions. Read the Preface ("Humboldt's Ghost") to Helferich, <i>Humboldt's Cosmos</i> and the Introduction (pp. xv-xxiii) to Stegner, <i>Beyond the Hundredth Meridian</i>. (Use the free electronic versions until you get the complete book, whether ink-on-paper or electronic.) Email instructor (Fischer) and mentor (Aminova) with the following information: 1) your preferred email address; 2) a statement about how you are getting the three core books for the course (electronic or print? from where?) and what you have done so far to get them (ordered, received?). 3) To your email attach this writing sample: "Writing assignment 2: Leaving Home". Name your file this way: <[Last Name_FirstName]_UNST236A_LeavingHome>. Only these file types are acceptable: .doc., .docx., .rtf, .pdf. This is not mere the policy of this course; it is widely followed everywhere.
<p>Week 2: Boats, roads & paths, legs & arms</p> <p>NOTE: Anything below here is tentative. Don't start on any of the activities yet.</p>	
<p>#03 • 14 January</p> <p>_____</p> <p>supplementary materials</p>	<ul style="list-style-type: none"> Poll & discussion: Review & expansion of Prof. Fuller's background presentation at meeting #2 our notions about the world of 1800 media representations of Humboldt and his world; the Weitsch portrait of Humboldt about scoring guides; about teamwork and group projects Humboldt & Hawaii (brief); summary (PDF) of keynote address, "Hula and the Natural World," (11 January 2014) by Dr. Samuel M. 'Ohukani'o 'hi'a Gon, III, Senior Scientist and Cultural Advisor, The Nature Conservancy of Hawai'i. Excerpts: "Dr. Sam Gon explores the symbology of the ornamentation and Hawaiian musical instruments inherent in hula, and the spiritual underpinnings of the ecosystems and plants of land and sea, and how they shaped the undeniably Hawaiian dance called hula. Sam has over 35 years of experience in Hawaiian ecology and he is also is versed in Hawaiian culture, history, and language, studying traditional Hawaiian chants, hula and cultural protocols." See also this article., including the part about his work with the Amazon rainforest and native communiites in Central and South America, and video interview. Humboldt-named schools (as targets of projects)
<p>#04 • 16 January</p> <p>_____</p> <p>supplementary materials</p>	<ul style="list-style-type: none"> Basic hands-on quantities and relations Humboldt's travel routes meanings of "nature", "ecology", "economy", "environment" Humboldt-named schools, and their problems and possibilities Humboldt & Hawaii (part 2 – part 3 could be YOU)
Mentor Workshop	<ul style="list-style-type: none"> Writing sample: narration of travel experience (if not done earlier) Maybe: Preparation for a later activity of making portraits of ourselves as environmentalists-explorers Quiz about course / other feedback. (will lap over into next week.) ••questionnaire: academics
Preparation for next week - do by Tuesday	<ul style="list-style-type: none"> Helferich, Chapter 1 "Tegel" (included in the Amazon free sample); Chapter 2 ("Tenerife") explore Humboldt school sites via the Humboldt Project website; get ready to choose a school and compare it to yours

Writing / other preparation	Imagine yourself going on some exploration to find out something about the environment / ecology / nature. How would you prepare? What would you wear? What would you bring along to help you find out whatever it is you want to find out? Think about some props and clothing and start to plan your own portrait. This will lead to a later writing assignment TBA
Housekeeping	commit to a subject area / topic for: special focus (can be more than one) throughout the course, individual reading (book report), lesson plan, team project; choose a Humboldt school (will lap over into next week's mentor workshops)
	top of page
Week 3: Lands, climates & people – then & now	
#05 • 21 January supplementary materials	Distances, areas, latitude, longitude, degrees. More about Humboldt-named schools and their part in this course. Standards for education (general, environmental).
#06 • 23 January supplementary materials	SINQing the Humboldt Canoe. Educational standards. Preview: Climates and plants (and animals)
Mentor Workshop	Academic background & interests questionnaire; sign up for individual reading and project, and group project
Preparation for next week - do by Tuesday	Helferich, Chapters 3 ("Cumaná") & 4 ("Caracas"); <i>Jaguars and Eels</i> , 3-28
Writing	Writing assignment 3: Your education and how it compares to standards.
Housekeeping	commit to a subject area / topic for individual reading and lesson plan; choose a Humboldt school (will lap over into next week's mentor workshops)
	top of page
Week 4: Plants – what they found, where they found it, why it was there, how they used it	
#07 • 28 January supplementary materials	Linnaeus and classification of life forms. What, how, and how much did explorers eat? Maybe: geology and other sciences in the time of Humboldt and Darwin (and Jefferson). Calculating volume and displacement of the Humboldt canoe, and then the content and weight of its cargo (human, animal, and other). ••Examples of Humboldt-related lesson plans mapped onto learning standards. Questionnaire: "hot-button" topics. / ••or: travel near Humboldt locations
#08 • 30 January supplementary materials	Humboldt's innovation of climate zones. What words did they have for "science" and "scientist", and what did those words mean? ••maps, triangulation, surveying, compasses, barometers, altimeters, transits, theodolites, and GPS; water flows downhill - or does it? the Orinoco/Amazon connection; book review assignment (see links below)
Mentor Workshop	Travel questionnaire and discussion: Have you been to places where Humboldt went? Where else? (continued in mentor workshop). Maybe: map skills questionnaire / ••hot button topics
Preparation for next week - do	Helferich, Chapters 5 ("The Llanos") & 6 ("The Orinoco"); <i>Jaguars and Eels</i> , 29-64; Use your computer/ smartphone map links and applications (see below,

by Tuesday	Housekeeping) to trace AvH's route in South America, starting with his travel up the Orinoco and down the Amazon. See Helferich, p. 52 map, but be aware that some place names have been changed over time.
Writing	Continuation of Writing assignment 3: Your education and how it compares to standards • preparation for book review assignment: assignment specifications and list of books to choose from
Housekeeping	task division within project teams/ commitment for individual contribution to the project; NOTE: will be modified shortly: getting ready to use smart phone apps in the course (and classroom): iPhone users: download these free apps: Google Earth, MapQuest, Compass, World Map, Elevation, My Altitude, GPS Lite, and - ESPECIALLY - Theodolite (NOTE: no longer no-cost app). Android and other users: See what you can find that is similar. All participants: You are expected to share resources, including smart phone resources, when you work together face-to-face-to-screen. Update (21 Feb. 2012): list of apps
	top of page
Week 5: Animals – Getting beyond Monsters, Jaguars, Eels, and Bambi	
#09 • 04 February supplementary materials	More about plants. Presentation: Lesson plans & pedagogy; location-based learning and other student outreach possibilities. More about the "My Education" writing assignment. Preview of the midterm exam.
#10 • 06 February supplementary materials	What to read, and when and how. Assessments, assignments, tests, and grades: Big Picture. Looking ahead, especially the group projects: dry-run discussion; organizing groups by interest and special strengths. Setup for the Midterm exam (done outside classroom).
Mentor Workshop	more peer reviewing; educational standards; discussion of individual species project and group projects; upcoming: study abroad possibilities, including (for example) environmental and business sustainability trips to Latin America, Europe, Asia.
Preparation for next week - do by Tuesday	Helferich, Chapters 7 ("The Amazon") & 8 ("Cuba"); <i>Jaguars and Eels</i> , 65-100 (end)
Writing	Mid-term (factual knowledge, critical thinking, internationalization, sustainability, self-assessment). Activated Thursday, 9 February. Due before/in class Thursday, 16 February.
Housekeeping	choose a Humboldt-named species or one related to Humboldt (electric eel, Brazil nut, plant that yields curare); form teams to work on projects, such as MtHood/Mt Tabor/Chimborazo; learning garden; Earth Day with Alex; "Humboldt Box" construction; grant investigation; study and presentations about AvH sites then and now; contacting schools; rebranding a school
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Week 6: Animals (continued); Rocks & soil; measuring the land	
#11 • 11 February supplementary	Humboldt's animals. Hands-on: topographical mapping. Initial formation of groups and exploration of group projects. Preview of next writing assignment (describe a Humboldt-related species for a specific target audience).

materials	
#12 • 13 February supplementary materials	What happens when you read Darwin? Humboldt's plant (and animal) geography: the monumental, iconic "Chimborazo" graphic. Continuation of organization of groups and developing group projects. What can we trust? An illustration (Bryson, Royal Society) involving Benjamin Franklin as a scientist and rebel. Start of Writing assignment 4: Describe a Humboldt-related species for a specific audience
Mentor Workshop	
Preparation for next week - do by Tuesday	Helferich, Chapters 9 ("Chimborazo") & 10 ("Cajamarca"); Lyon Arboretum lesson plans correlated to state educational standards benchmarks
Writing	Writing assignment 4: Describe a Humboldt-related species for a specific audience
Housekeeping	continue organizing teams for group projects
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Week 7: Rocks & soil, weather & water	
#13 • 18 February supplementary materials	More about the Chimborazo graphic, and similar "iconic" scientific graphics. Examples of group projects for "difficult" majors (architecture, business/accounting, PE/Sports) or subjects (music). (How) can we trust our data? Examples of periodicals for the college-educated citizen.
#14 • 20 February supplementary materials	Expensive instruments, precise observations, extreme conditions. Climate and species zones. Little Science then, Big Science now. Project groups report out. Leaders and experts encouraged to come forth.
Mentor Workshop	project proposal documents; time for group project activities
Preparation for next week - do by Tuesday	Helferich, Chapters 11 ("New Spain") and 12 ("Washington, Paris, and Berlin")
Writing	Groups establish their project idea, goals, tasks and record that information in writing.
Housekeeping	schedule & hold group (e-)meetings
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Week 8: Stars & numbers	
#15 • 25 February supplementary materials	The geology and paleontology of Humboldt's time - and time itself in Humboldt's time (and ours). Misconceptions about the knowledge of earlier times. More about Writing assignment 4: Describe a Humboldt-related species for a specific audience. More about good writing and good reading. Group projects: specifics about teams, their goals, their tasks, individual responsibilities. Maybe a quantitative activity (How much wood for that canoe? How serious an error of 3 degrees of longitude / latitude?).
#16 • 27 February	Humboldt and navigation & map-making. The world Now and in 1600 (-1900+), especially standards of living and how that relates to sustainable environmentalism. Group projects (including ideas for stragglers). Humboldt's music (via Gottschalk).

supplementary materials	
Mentor Workshop	species descriptions; projects; tutorial: probability and statistics
Preparation for next week - do by Tuesday	Helferich, "Epilogue";
Writing	documents for group project
Housekeeping	schedule & hold group (e-)meetings
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Week 9: Societies & outlooks	
#17 • 04 March handout	AvH's encounters with native (and pseudo-native) peoples - a quick inventory for later discussion. Bringing "interpreting the past" and "sustainable environmentalism" together: discussion of Then and Now - specific experiences, notions of happiness, wealth, prosperity, standard of living, etc. Information sources: a) what we use; b) standard resources for the "educated citizen" reader (and writer)
#18 • 06 March supplementary materials	Interaction of cultures: how have we ourselves behaved? What about the "carguero" incident during Humboldt's travel in South America? Humboldt's "current" in the United States and elsewhere in the "New World"; Example of "educated citizen" reading, related to our course. ?Handout: practice text for final exam.
Mentor Workshop	study / work abroad opportunities
Preparation for next week - do by Tuesday	article "Climbing the Redwoods" for in-class discussion during weeks 9 & 10, as practice for final exam
Writing	more about group projects
Housekeeping	maybe put together your "(Thought-)Portrait of the Young Student as Alexander/Alexandra von Humboldt"
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Week 10: Languages, races, peoples; going/coming home	
#19 • 11 March supplementary materials	Interaction of cultures: what is "civilization"? The "carguero" incident: AvH and the indigenous porters. Group project presentations. Short practice text for final exam. If time: John Wesley Powell, "beyond the 100th meridian", settlement of the American West, Oregon, and water/land use. More examples of "educated citizen" reading.
#20 • 13 March supplementary materials	Group project presentations. Humboldt's legacy, including his legacy in the US (Romantics, geologists, geographers, hydrologists, surveyors, emigrants). Linguistics and Ethnology in the Lives and Work of the Humboldt brothers, Powell, and later. Powell and Indians, Cowboys, Mormons, Easterners and Foreigners. If time: The Dust Bowl and the Great Depression; economic sustainability. Humboldt as a political activist (French Revolution 1789 - lead-up to American Civil War). <i>Cosmos</i> & <i>Cosmos</i> . Going home. How to review for the final. How to finish up course work. Is there life (or at least something) after the Humboldt SINQ? If time: hands-on math learning in honor of "pi-day" (3/14)

	Handout: reading text for final exam.
Mentor Workshop	course evaluations; cultural issues: diversity, ethics
Preparation for next week - do by Tuesday	read article (provided) for final exam; final exam is closed book, other than the article you read in preparation for the exam. BRING IT WITH YOU AND TURN IT IN AT THE END OF THE EXAM!
Writing	finish up group projects; revise your various writing assignments for re-scoring and re-grading
Housekeeping	
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Final(s) week: Coming home: projects, progress, prospects	
Final exam: Tuesday, March 18, 1530-1720	Deadline for final assignments & projects: Friday, March 21, 1700, Pacific Time (paper or electronic)
Preparation for the future	Whatever this course inspires you to read and think about after it is over
Writing	Whatever you write, in your role as student or citizen, as a result of this course
Housekeeping	turn in papers, return my books
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