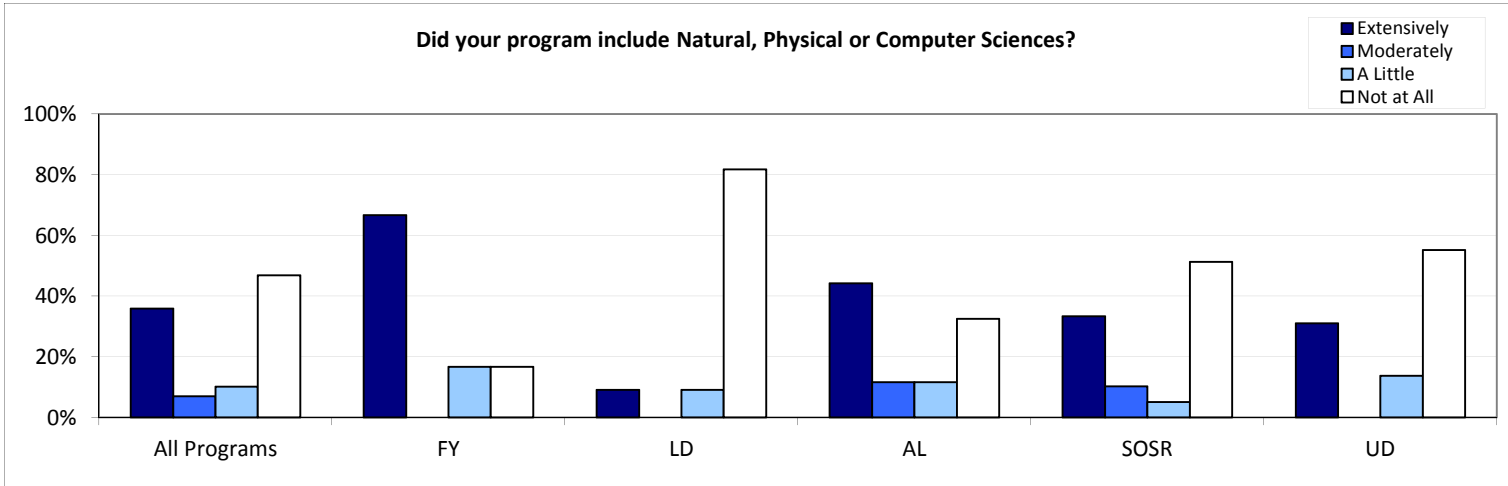
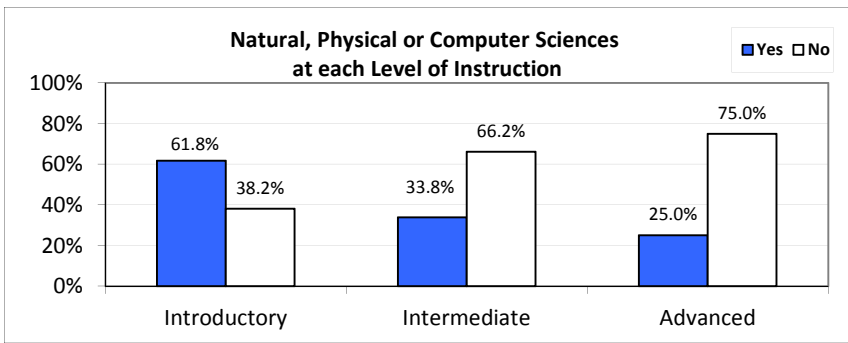


End-of-Program Review 2013-14
Natural, Physical or Computer Sciences in all Programs



	Extensively	Moderately	A Little	Not at All	Percent of Programs with any Natural, Physical or Computer Sciences	Programs with any Natural, Physical or Computer Sciences (N)	Programs responded (N)
All Programs	35.9%	7.0%	10.2%	46.9%	53.1%	68	128
First-year (FY only)	66.7%	0.0%	16.7%	16.7%	83.3%	5	6
Lower Division (LD) FY-SO	9.1%	0.0%	9.1%	81.8%	18.2%	2	11
All Level (AL) FR-SR	44.2%	11.6%	11.6%	32.6%	67.4%	29	43
Sophomore-Senior (SOSR)	33.3%	10.3%	5.1%	51.3%	48.7%	19	39
Upper Division (UD) JR-SR	31.0%	0.0%	13.8%	55.2%	44.8%	13	29



				Fields/areas of Natural, Physical or Computer Sciences		
All programs with Natural, Physical or Computer Sciences	Program Type	Faculty	Extent	Introductory	Intermediate	Advanced
A Sense of Wonder	SOSR	*Hirsh Diamant, Nancy Parkes	Extensively		Nature observation	
From the Fire: Art and Science of Ceramics	LD	*Dharshi Bopegedera, Susan Aurand	Extensively	Chemistry		
Re-Imagining the Body	AL	*Hirsh Diamant, Cindy Beck	Extensively	Anatomy & Physiology		
River Reciprocity	AL	*Lucia Harrison	Extensively	Stream Ecology		
Taking Things Apart: A Scientific and Artistic Exploration	AL	*Donald Morisato, Bob Haft	Extensively	Neurobiology Genetics and Molecular Biology	Neurobiology Genetics and Molecular Biology	
The Adaptive Meaning of the Musical Mind	AL	*Andrea Gullickson, Bret Weinstein	Extensively		Evolutionary Biology	
Botany Plants and People	SOSR	*Frederica Bowcutt	Extensively	Intro plant science	Economic botany Research in botany Plant anatomy and morphology	
Algebra to Algorithms	AL	*Richard Weiss, Judith Cushing	Extensively	Object Oriented Programming, Smalltalk programming, TDD (test-driven development), reuse, inspection & debugging, number hierarchy, Morphs Design Patterns, algorithm implementation, considerations of optimization, selected existing classes, computer architecture Earth Science, Physics, Astronomy, Botany, Architecture Anatomy, Neuroscience	Object Oriented Programming, Smalltalk programming, TDD (test-driven development), reuse, inspection & debugging, number hierarchy, Morphs	
Animal Behavior and Zoology	UD	*Heather Heying	Extensively	Physics Chemistry	Earth Sciences	Biology
Computers and cognition	AL	*Ab Van Etten	Extensively		Computer Science	
Critical Thought and Social Consciousness Through Film	AL	*Michelle Aguilar-Wells	Extensively	[Faculty did not elaborate.]		
Energy Systems and Climate Change	SOSR	*EJ Zita	Extensively	Bio-Chemistry Climate Change Science	Physics Earth Science Sustainable Energy and Agriculture Climate Change Science	
Field Plant Taxonomy	AL	*Frederica Bowcutt	Extensively		Botany Ecology	
Marine Life: Marine Organisms and Their Environments	UD	*Gerardo Chin-Leo, Erik Thuesen	Extensively			Marine Biology Oceanography

Molecule to Organism	SOSR	*Lydia McKinstry, Clarissa Dirks	Extensively			Biology: Cellular & Molecular Biology, Microbiology, Immunology and Microbial Pathogenesis, Malacology Chemistry: Organic Chemistry and Biochemistry
The Design of Computational Things	AL	*Paul Pham	Extensively	Computer Science Electricity and Electronics		
The Fungal Kingdom	AL	*Noelle Machnicki	Extensively			Ecology Mycology Biology
The Natural and Evolution of Human Psychology	FY	*Heesoon Jun, Bret Weinstein	Extensively	Evolutionary biology Human biology		
The Pillars of Health, Ancient and Modern	AL	*Cindy Beck	Extensively		Kinesiology	Exercise physiology
Advanced Research in Environmental Studies with A. Styring	UD	*Alison Styring	Extensively			Ornithology - both bird communication and bioacoustics as well as breeding biology Statistics Scientific Writing
Advanced Research in Environmental Studies with E. Thuesen	UD	*Erik Thuesen	Extensively			Marine Science Eco physiology
Applied Biology and Chemistry	SOSR	*Paula Schofield, Andrew Brabban	Extensively			Polymer Chemistry Industrial Chemistry Molecular Biology Biotechnology
Avian Research and Monitoring Methods: Winter Bird Ecology	UD	*Alison Styring	Extensively		Statistics	Ornithology Field research in avian ecology Statistics Scientific writing
Computer Science Foundations	AL	Neal Nelson(F), Richard Weiss(W,S), *Sheryl Shulman, Paul Pham	Extensively	Computer Science	Computer Science	
Doing Research: Addressing Topics That Matter	AL	*Emily Lardner, Allen Mauney	Extensively	Climate Science		
Earth Matters: Geology and Chemistry	AL	Dharshi Bopegedera, *Abir Biswas	Extensively	Earth Sciences Chemistry	Earth Sciences	
Ecological Agriculture: The Science and Policy of Food Systems	SOSR	*Martha Rosemeyer, Thomas Johnson(F,W)	Extensively		Agriculture Ecology	Soil Science
Evolution and Ethics	SOSR	*Stephen Beck, Karen Hogan	Extensively	Biology		
Fire and Water: The Sun, Oceans and Atmosphere in Climate Change	SOSR	*Gerardo Chin-Leo, EJ Zita	Extensively		Physics of Global Climate Change Oceanography of Global Climate Change	

Genes and Evolution	UD	*Donald Morisato, Heather Heying	Extensively	Genetics Microevolution Animal behavior	Genetics Microevolution Animal behavior	Genetics Microevolution Animal behavior
Introduction to Natural Science	AL	*James Neitzel, Kristopher Waynant, Mario Gadea(F,W)	Extensively	Biology Chemistry Physics		
Language Counts	AL	*Richard Weiss, Diego de Acosta	Extensively	Computer Science: intro programming in Python		
Mammals and Birds in the Landscape	UD	*Peter Impara, Dina Roberts	Extensively			Landscape Ecology Geographic Information Systems Wildlife Ecology
Matter and Motion	AL	*Clyde Barlow(F,W), Neil Switz	Extensively	Calculus based Physics with lab Computer data acquisition General Chemistry with lab		
Northwest Developments: Land Use, Economics and the Politics of Growth	AL	*Jennifer Gerend, Glenn Landram	Extensively	GIS, Excel		
Ocean Life and Environmental Policy	FY	*Erik Thuesen	Extensively	Marine Biology General biology		
Our Changing Oceans: Bringing Together Science and Policy	FY	*Rika Anderson	Extensively	Earth Sciences Biology Chemistry		
Patterning the World: Connecting Mathematics and Science	AL	*Krishna Chowdary, Neal Nelson	Extensively	Physics		
Patterning the World: Connecting Mathematics and Science (S)	AL	*Krishna Chowdary, Neal Nelson	Extensively	Physics		
Riparian Environments	UD	*Kenneth Tabbutt, Alison Styring	Extensively			Ecology Earth Science
The Science Behind the Headlines: What's the Truth?	FY	*Paula Schofield, Andrew Brabban	Extensively	Environmental Science (Lab and Field Science) Forensic Science (Lab and Field Science) Materials Science		
Undergraduate Research in Scientific Inquiry with A. Brabban	SOSR	*Andrew Brabban	Extensively		Chemistry	Microbiology Biology
Undergraduate Research in Scientific Inquiry with D. McAvity	SOSR	*David McAvity	Extensively		Computer Modeling Mathematical Biology	
Undergraduate Research in Scientific Inquiry with J. Neitzel	SOSR	*James Neitzel	Extensively			Chemistry (Organic, Natural Products, and Instrumental Analysis) Biology (Molecular Genetics,
Undergraduate Research in Scientific Inquiry with N. Switz	SOSR	*Neil Switz	Extensively		Optics, image processing, microscopy, physics of waves, physics of light.	Optics, image processing, microscopy, physics of waves, physics of light.

Undergraduate Research in Scientific Inquiry with P. Schofield	SOSR	*Paula Schofield	Extensively			Biomedical Polymers; Polymer Chemistry
Shipwrecked! Imperialism, Capitalism, Racism, and Cannibalism in the Golden Age of Sail	AL	*John Baldrige	Moderately	Basic physics - vectors, pressure, and force related to sailing vessels Astronomy - basic celestial navigation principles, using right ascension/declination, and field work, constructing and using simple navigational instruments Earth Sciences/Climatology - readings/lectures that included introductions to general climatic patterns, such as the jet stream, gulf stream, trade winds, and the Intertropical Convergence Zone (ITCZ), and why they exist		
China: Business, Economy, Society, Sustainability	AL	*David Shaw	Moderately	Sustainability and the Environment - China, including policies	Sustainability and the Environment - China, including policies	
Ecotourism and Adventure Travel in a Threatened Biosphere	SOSR	*David Phillips	Moderately	Website development	Pacific Northwest ecology and nature conservation Geography, regional and world	
Psychology as a Hub Science	SOSR	*Mark Hurst	Moderately		Six hub sciences (physics, math, etc.)	
Systems Theory for Business and Organizations	AL	*Kathy Kelly	Moderately	Ecosystem Science		
Andean Roots: Language and Cultural Landscape	SOSR	*Rachel Hastings, Steven Scheuerell	Moderately	Agriculture		
Business Foundations	AL	*Allen Jenkins	Moderately	Computer programming Software		
Entrepreneurship and Economic Development	SOSR	*John Filmer	Moderately		Excel	
Inside Language	AL	*Diego de Acosta	Moderately	Linguistics		
Bella Bella or Bust - 2014	AL	Yvonne Peterson(F,S), *Gary Peterson, Michelle Aguilar-Wells(W)	A little	[Faculty did not elaborate.]		
Orissi Dance and Music of India	AL	*Andrew Buchman, Ratna Roy	A little	Geography Discussions of plate tectonics Ecology of India		
The Authentic Self: Becoming an Instrument of Change	UD	*Marla Elliott, Marcella Benson-Quaziena	A little	Some introduction to concepts in physics		
The Business of Art: Earning a Living as an Artist	SOSR	*Andrew Buchman, Zoe Van Schyndel, Doreen Swetkis	A little	Database Software		
Current Social and Economic Issues: Explanations, Actions and Solutions	LD	*Peter Bohmer	A little	Climate Studies		

Japan Today: Japanese History, Literature, Culture, Cinema, Society, and Language	AL	*Harumi Moruzzi, Tomoko Hirai Ulmer	A little	[Faculty did not elaborate.]		
Madness and Creativity: The Psychological Link	FY	Patricia Krafcik, Carrie Margolin, *Evan Blackwell	A little	Chemistry Earth Sciences		
Poetry of Place	SOSR	*Suzanne Simons	A little	Natural history		
Business, Finance and Strategy	AL	*Glenn Landram	A little	Environmental Ornithology		
Healthy Inequity: Telling the Story and Changing it	UD	*Nancy Anderson, Lori Blewett(F), Frances V. Rains(W,S)	A little	The students manipulated databases online to learn more about pop. health.		
Modernity and Its Discontents	UD	*Kathleen Eamon, Trevor Speller	A little	I'm not sure if to count this, but a theme in our program was history of science, the emergence of science, scientific revolutions, but never with much science content...		
Community-Based Research: Social and Environmental Justice	AL	*Lin Nelson	A little	Public Health		
TRI: Contemporary Indian Communities in a Global Society - Nisqually	UD	*Mary DuPuis	A little	Computer Sciences		

* Program coordinator