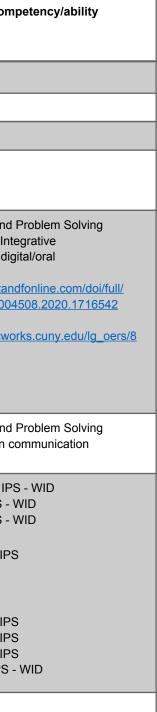
Research in the Curriculum Department of Natural Sciences

Research in the curriculum in the Department of Natl. Sc. at LaGuardia CC, is understood as the practice where research activities or projects, embedded in the curriculum and incorporated into the classroom, are designed to move students from observers of science to science practitioners, promoting critical thinking, contributing new information to the body of scientific knowledge, building communities both within and outside the classroom, sparking curiosity and understanding of the interrelationship between science and society.

Project work outside regular lab Modification of 9 labs, flipped class -course, objectives not modified. Students learn concepts and apply different techniques to discover physical, chemical and	Fall 2017 Spring 2018	4	Dr. Charles Keller Dr. Na Xu Dr. Maria Entezari Dr. Lucía Fuentes		
regular lab Modification of 9 labs, flipped class -course, objectives not modified. Students learn concepts and apply different techniques to discover physical, chemical and			Dr. Na Xu Dr. Maria Entezari		Inte
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biological characteristics, of water samples (results of experiments are unknown to them or their instructors)					https://www.tan 10.1080/20004 http://academicwo
Project done over weeks 4-12 of the course	Ongoing, since 2012	1 or 2 sections/sem ester offered	Dr. Thomas Onorato	Was funded TRAIN Grant (just ended)	Inquiry and Written c
Alternative molecular methods of microbial identification are introduced in lab. Course objectives are modified slightly to encourage scientific research, & development of analytical and critical thinking skills during the identification of individual unknown	Fall 2014 Fall 2015 Fall 2016 Spring 2017 Fall 2017	1 1 1 1	Dr. Olga Calderón Dr. Olga Calderón Dr. Olga Calderón Dr. Olga Calderón Dr. Ingrid Veras Dr. Joby Jacob Dr. Olga Calderón Dr. Olga Calderón	CCURI	IPS IPS - \ IPS - \ IPS IPS IPS IPS IPS -
	introduced in lab. Course objectives are modified slightly to encourage scientific research, & development of analytical and critical thinking skills	introduced in lab. Course objectives are modified slightly to encourage scientific research, & development of analytical and critical thinking skills during the identification of individual unknown	introduced in lab. Course objectives are modified slightly to encourage scientific research, & development of analytical and critical thinking skills during the identification of individual unknown	introduced in lab. Course objectives are modified slightly to encourage scientific research, & development of analytical and critical thinking skills during the identification of individual unknownFall 20161Dr. Olga CalderónFall 20171Dr. Olga CalderónDr. Olga CalderónDr. Olga Calderón	introduced in lab. Course objectives are modified slightly to encourage scientific research, & development of analytical and critical thinking skills during the identification of individual unknown Fall 2017 4 Dr. Ingrid Veras Dr. Joby Jacob Dr. Olga Calderón



Envi. Scie Capstone (SCG250)	Newtown Creek, Hudson River, Flushing Creek/Bay, other NYC waterways	Laboratory based analysis	Students collect weekly water samples and test them for metals and polyatomic ions in lab every week as independent, semester- long, research projects.	Every Spring semester since 2012 (course runs only in Spring)	1 (only 1 section currently offered)	Dr. Holly Porter-Morgan		
GIS (SCG150)	New York City Environmental Hazard	Lab-based (GIS is a computer skill, so)	Students collect online data on environmental hazards (TRIs, brownfields, csos) map it and do spatial analysis to determine who lives near it and if there is an environmental justice issue. Expanding to include field component with air pollution data collection this fall with Keller and Alberts.	Either Fall I or II since 2012	1 or 2 sections.	Dr. Holly Porter-Morgan		
Chemistry SCC-201	Chemistry of Newtown Creek water	Laboratory based analysis	Modification of 3 labs	Fall 2017	2?	(Dr. Jennifer Vance) Dr. Kevin Mark	CCURI?	Inquiry and Pro
Course	Research Project	Nature of Activities	Description	Semester(s) Implemented	# of sections	Faculty developing/ implementing	Larger Initiative/Other notes or comments	Core Cor

Research initiatives "out of classroom" CRSP NIH-Bridges CCURI

