

William J. Hernández López

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Education:

B.S. in Science in Biology (2000) Major: Biology (142 crs.) GPA: 3.60
University of Puerto Rico-Mayagüez Campus

M.S. in Environmental Sciences (2005) Major: Water Resources (42 crs.) GPA: 4.00
Inter American University of Puerto Rico-San German Campus

Ph D. in Marine Science (expect. 2011) Major: Oceanography (67 crs.) GPA: 3.90
University of Puerto Rico-Mayagüez Campus

Professional Development Courses (16 crs.) GPA: 4.00
Psychology of Learning and Development, Biochemistry, Analytical Chemistry

Professional Experience:

Dates

Geographic Mapping Technologies Corp. 06/2008-present
54 Calle Mayagüez, San Juan, Puerto Rico 00936
Duties: GIS Consulting (Project Manager, Service Representative, Instructor)

University of Puerto Rico-Mayaguez Campus 06/2006-present
Mayaguez, Puerto Rico
Duties: Graduate Researcher, Webmaster Bio-Optical Oceanography Laboratory
<http://bio-optics.uprm.edu>

U.S. Fish & Wildlife Service 04/2005-02/2008
Caribbean National Wildlife Refuge. Boquerón, Puerto Rico
Duties: Fish and Wildlife Biologist/GIS Specialist (GS-07)

Inter American University of Puerto Rico-San German Campus 03/2003-07/2005
San German, Puerto Rico
Duties: Geographic Information System Computer Analyst/Technician

Seminars and Workshops:

National Oceanic and Atmospheric Administration Educational Partnership Program Fifth Education and Science Forum. Howard University, Washington DC, November 2009

FWS GIS National Workshop. National Conservation Training Center. Shepherdstown, WV. U.S. Fish & Wildlife Service. 2006; 2007

USFWS Refuge Lands GIS Training, Broomsfield, Colorado, March, 2007

ESRI Federal User Conference, Washington DC, January 8-12, 2007

ESRI Annual International User Conference, San Diego, C.A. ESRI. 2006; 2004

GIS Design for Natural Resource Lands Management. National Conservation Training Center. Shepherdstown, WV. U.S. Fish & Wildlife Service. December, 2005

GIS Cartographic Design Course. National Conservation Training Center. Shepherdstown, WV. U.S. Fish & Wildlife Service. August, 2005

ESRI Virtual Campus Online Courses (<http://campus.esri.com>)

Working with Geodatabases Topology

Working Map Projections and Coordinate Systems in ArcGIS

Getting Started with Scripting in ArcGIS

Editing in ArcGIS 9: Tips and Tricks

Getting Started with Surface Analysis using ArcGIS Spatial Analyst.

Learning ArcGIS 3D Analyst.

Groundwater Flow and Transport Modeling with GMS. Park City Marriott Hotel, Park City, Utah
Dr. Norm L. Jones. October, 2003.

Special Skills:

Bilingual: Spanish and English languages

Computer Systems: Mac OS, Windows, Unix, Linux

Specialized Software: ArcView v9.3, Spatial Analyst, 3D Analyst, ArcIMS 9.3, ArcPad 7.1, Groundwater Modeling System v4.0, SeaDAS v5.4, ENVI v4.5, ERDAS Imagine, ORIGIN v7.0, Trimble GPS Correct. Adobe Dreamweaver

Oceanographic, Bio-optical, and Remote Sensing Techniques and Instrumentation

Equipments: GPS receivers (Garmin, Trimble Mapping Grade) Bio-Optical Equipment (Satlantic Hyperspectral Profiler, GER 1500 Spectroradiometer, Optical Package, Solarlight PMA2100 Datalogging Radiometer (PAR Collector)

Research:

Modeling the potential habitat of mesophotic coral reefs in the Puerto Rico-Virgin Islands Geological Platform. 2009. (Current Dissertation Topic). Department of Marine Sciences. University of Puerto Rico-Mayaguez Campus

Development of an empirical algorithm for chlorophyll-a estimation in coastal waters. 2006.
http://gers.uprm.edu/pdfs/pres_crest08.pdf

Development of a benthic habitat map using different remote sensing methods: a case study for Vieques Island South Coast Bays. 2005.

Determination of Groundwater and Particle Flow Using Mathematical Modeling in Groundwater System of Barrio Llanos, Lajas, Puerto Rico. 2005.

GIS for University Infrastructure and Natural Resources Sustainable Management. 2004.

Achievements, Awards and Affiliations:

Member of the Association of American Geographers (AAG) (since 2006)

Graduate Student in Environmental Sciences Academic Excellence Award: Inter American University-San German Campus (2004, 2005)

Academic Excellence Graduate Honor Student: Academic Excellence Award Ceremony, Inter American University-San German Campus (2004)
Who's Who Among American Students Award (2004, 2005)
PRIDCO Scholarship for Masters in Environmental Sciences 2003-2004. Commonwealth of Puerto Rico-PRIDCO
UPR Mayaguez Campus Graduation (2000) Magna Cum Laude Student
Dean's List Award (1999)
Golden Key National Honor Society Member (since 1998)
All-American Scholar Award (1997)

Key Presentations and Publications:

Gilbes, F., **W. Hernández**, N. Hernández, J. Martínez, and V. Rodriguez (2008) **MODIS Validation for Water Quality Parameters in Mayagüez Bay**, Oral Presentation, Annual NOAA-CREST Symposium, Mayagüez, Puerto Rico.

Hernandez, William J., Gilbes, Fernando. 2007. **GERSVIEW: A New Database for Web Mapping**. PRYSIG 2007. University of Puerto Rico Mayagüez Campus http://gers.uprm.edu/pdfs/pres_whernandez.pdf.

Hernández, William J. 2006. **Use and Application of GIS in Wildlife Refuges**. 4th Annual Geographic Information Systems and Remote Sensing Conference. University of Puerto Rico-Mayagüez Campus. <http://cacique.uprm.edu/prysig/index.html>

Hernandez, William J. 2005. **Determination of Groundwater Flow using Mathematical Flow Models in Barrio Llanos Costa, Lajas, Puerto Rico**. X Ibero-American Conference of Geographic Information Systems, San Juan, Puerto Rico.

Hernandez, William J., Sanders, Ilse. **GIS for University Infrastructure and Natural Resources Sustainable Management**. ArcNews Online. Summer 2005 ESRI Press. 2005.

References:

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