Contact Information:

Name: Nathan Silva Email: <u>Nathan.Silva@nsc.edu</u> Office Number: 702-992-2673 Business Address: 1300 Nevada State Drive Henderson, NV 89002

Education:

- Ph.D. Marine Science '08 University of California, Santa Barbara from the Interdepartmental Graduate Program in Marine Science Dissertation:
- B.S. Biology Spring '03 California Lutheran University (Summa Cum Laude)

Experience:

- Teaching
 - Biology Lecuturer from Spring 2019-Present at Nevada State College Primary Teaching responsibilities include Hybrid version of Biol 189.
 - First Year Experience Lecturer from Fall 2017 to Winter 2018 at Nevada State College. Primary Teaching responsibilities include ALS 101 and Biol 189.
 - Part-Time instructor from Fall of 2009 to Summer of 2014 at Nevada State College (averaging 15+ unit hours per semester, including summers) Including 45+ sections of Fundamentals of Life Science (Biol 189), 1 section of Independent Research Project (Biol 491), 3 sections of Conservation Biology (Biol 305) and 1 section of Desert Plants (Biol 122)
 - Instructor of Record for two quarters of Introductory Biology (MCDB 1A & MCDB 1B) during the summer sessions of 2008 at UCSB.
 - Multiple teaching assistant positions during graduate school in General Biology Lab, Prokaryotic Genetics and Eukaryotic Genetics
 - Multiple teaching assistant positions in undergrad in both Major and Non-Major Biology and Marine Biology courses.

• College Administration

- Adjunct Faculty Coordinator from Summer of 2014 to Fall 2017 at Nevada State College
- Responsibilities include: Developing and delivering training materials for adjunct faculty, providing feedback to adjunct faculty on course structure and design based on direct observation, participating in the administrative activity of the college including participating in several committees (search committees, technology advisory committee and professional development committee).

• Research

- Instruction of undergraduates in a laboratory setting (Fall 2009 Present)
- Independent Research Project with Undergraduate Student at Nevada State College (Fall 2011)
- Molecular, developmental, and population biology research in the lab of Bill Smith at UCSB: Summer '03 Summer '08.

- Protein extraction and expression studies in David Marcey's genetics lab (*Drosophila*) at CLU: Summer '02 – Summer '03
- Lab skills in general molecular biology (nucleic acid isolation, electrophoresis, PCR, sequencing, restriction digests, AFLP)
- Lab skills in genetics of *Drosophila* and ascidians (controlled crosses, scoring progeny, basic animal husbandry, loci mapping)

• Educational Technology and Curriculum Development

- Technology Fellow for several summers at Nevada State College during which time the Biol 189 Supercourse Canvas shell was developed with training and media-rich materials for students and PTIs, Biol 196 and 197 courses were redesigned for the Gateways to Completion program and the Learning Management System training course was developed and the framework for the CTLE Canvas page. Gamefied hybrid version of Biol 189 developed during Summer of 2018 and Linked Pre-nursing Cohort program developed during summer 2019 (Summers of 2012-2015 and 2017-2019)
- Piloted an iPad-focused section of Biol 189 to assess the usefulness of integrating this teaching technology in a broader scale at NSC (Fall 2013)
- Development of a standardized lab book for Biol 189 based on kit labs and resources available at NSC (1st edition Spring 2013, 2nd edition Fall 2016)
- Development and maintenance of course pages in Learning Management Systems (Blackboard, then Canvas) since the Fall of 2009 at NSC

• Publications

- Silva N, Vanier C, Patel V (2016) Fundamentals of Life Science Lab Book for Biology 189 at Nevada State College. 2nd Edition. Kendall Hunt Publishing Dubuque, IA ISBN – 9781465297341
- Silva N (2013) Fundamentals of Life Science Lab Book for Biology 189 at Nevada State College. 1st Edition. Kendall Hunt Publishing Dubuque, IA ISBN 9781465223531
- Silva N (2008) An Assessment of the Level of Genetic Polymorphism on the Ascidians of Santa Barbara, California. Ph.D. Dissertation, ProQuest/UMI "ucsb1902"
- Silva N, Smith WC (2008) Inverse Correlation of Population Similarity and Introduction Date for Invasive Ascidians. PLoS ONE 3(6): e2552. doi:10.1371/journal.pone.0002552
- Marcey, D, and Silva, N. (2007). RNA Polymerase. A web-based, Jmol macromolecular tutorial to accompany *Molecular Biology of the Gene (Watson, et al.) 6e*. Benjamin Cummings, San Francisco, Cold Spring Harbor Laboratory Press.
- Marcey, D, and Silva, N. (2004). Green Fluorescent Protein. A web-based, Chime macromolecular tutorial to accompany *Molecular Biology of the Gene (Watson, et al.) 5e*. Benjamin Cummings, San Francisco.
- Marcey, D, and Silva, N. (2004). RNA Polymerase. A web-based, Chime macromolecular tutorial to accompany *Molecular Biology of the Gene (Watson, et al.) 5e*. Benjamin Cummings, San Francisco.