Overview
The College of Natural Sciences at the University of Hawai‘i at Mānoa consists of seven academic departments (Biology, Botany, Chemistry, Information & Computer Sciences, Mathematics, Microbiology, and Physics & Astronomy) and 3 academic programs (Library & Information Science, Marine Options, and Marine Biology Graduate). The College has approximately 2,100 undergraduates, 400 graduate students and 140 faculty.

College Website: natsci.manoa.hawaii.edu

STEM Degree Programs:
- Astronomy (BA, MS, PhD)
- Astrophysics (BS)
- Biochemistry (BA, BS)
- Biology (BA, BS)
- Botany (BA, BS, MS, PhD)
- Chemistry (BA, BS, MS, PhD)
- Comm. & Info. Sciences (PhD) - Interdisciplinary
- Computer Science (BS, MS, PhD)
- Ethnobotany (BS) – currently on stop-out status
- Information & Computer Sciences (BA)
- Marine Biology (BS)
- Marine Biology (MS, PhD) – joint with SOEST
- Mathematics (BA, BS, MS, PhD)
- Microbiology (BA, BS, MS, PhD)
- Molecular and Cell Biology (BS)
- Physics (BA, BS, MS, PhD)
- Zoology (BA, BS) – currently on stop-out status
- Zoology (MS, PhD)

STEM Education Funding since FY2012: $6,563,468*

College Profile:
- Total Enrollment (Fall 2016)*: 2,500
- % Women: 51%
- % Native Hawaiian: 10%
- Degrees Awarded (2015-16):
  - Bachelor’s: 385
  - Masters: 69
  - Doctorate: 34

STEM Profile:
- Total STEM Enrollment (Fall 2016): 2,436
- % Women: 51%
- % Native Hawaiian: 10%
- STEM Degrees Awarded (2015-16):
  - Bachelor’s: 385
  - Masters: 38
  - Doctorate: 34

* Calculated based on STEM education grants in ORS reports. Multi-campus grants are listed under PI’s institution
* Enrollment counts excludes students not home-based at this campus
Selected STEM Education & Outreach Projects

STEM EDUCATION

The College of Natural Sciences (CNS) provides instruction that serves STEM majors across the UH Mānoa campus. In combination, CNS departments provide 15-16% of the total UH Mānoa student semester hours each academic year. The Department of Mathematics traditionally teaches the most SSH for a single UH Mānoa Department.

Beyond offering science and math courses, CNS supports student success through a myriad of opportunities and services. One example is a multi-department collaboration, the CNS Learning Emporium, a one-stop center for assistance in introductory level courses in the fields of mathematics, chemistry, information & computer sciences, and physics. Students join a community of learners and engage in conversations to strengthen their knowledge and understanding of the material covered in the first two years of the STEM curriculum. The Learning Emporium is staffed by undergraduate and graduate tutors and volunteer faculty.

STEM EDUCATION RESEARCH

Online Q&A in STEM Education: Curating the Wisdom of the Crowd. This project investigates how combining crowdsourced information with the quality assessment standards of librarians and other information professionals can enhance the experience of students in STEM fields.

To learn more about these STEM Education projects, please contact:

natsci@hawaii.edu

STEM OUTREACH

Faculty, staff, and students in the College of Natural Sciences are committed to contributing to STEM education efforts beyond the university.

Examples include:

- GenCyber Hawai’i
- Math Teachers’ Circle Hawai’i (MaTCH)
- QuarkNET
- School and University Partnership for Educational Renewal in Mathematics Project (SUPER-M)
- Physics Outreach Program at Nanakuli
- Educational Programs at the Institute for Human Services
- Physics and Astronomy Open House
- Keiki Ecology: Seedling Experiments to Learn about Plant Conservation
- Cultural-based Science, Technology, Engineering and Math (C-STEM) Project
- Our Project in Hawai’i’s Intertidal (OPIHI)

A full listing of Education and Outreach projects by the College of Natural Sciences are located at:
natsci.manoa.hawaii.edu/educationandoutreach.html