# Natural and Physical Science Majors at FSU

## Biological Science

**What is it?**
- The study of life and the structure and behavior of living organisms.

**What will I study?**
- A broad study of biology core classes coupled with specialty elective areas in cell and molecular biology; evolution and environmental science; marine biology; zoology; physiology; neuroscience; plant science; ecology; and pre-professional health science.

**What courses will I need before I start?**
- Precalculus
- Analytic Trigonometry
- Biological Science I w/ Lab
- Biological Science II w/ Lab
- General Chemistry I w/ Lab
- General Chemistry II w/ Lab

**Who can I contact for information?**
- Bonnie Garcia-Gloeckner, Advisor
  bgarcia@bio.fsu.edu

## Biochemistry

**What is it?**
- The study of chemistry, physics and math to understand the chemical framework for all life processes.

**What will I study?**
- A broad introduction to biochemistry through a foundation in analytical, organic, and physical chemistry courses coupled with biological science and genetics.

**What courses will I need before I start?**
- Calculus I
- Calculus II
- Biological Science I w/ Lab
- Biological Science II w/ Lab
- General Chemistry I w/ Lab
- General Chemistry II w/ Lab
- Organic Chemistry I w/ Lab
- Organic Chemistry II w/ Lab

**Who can I contact for information?**
- Joshua Cummings, Coordinator
  jcummings@chem.fsu.edu

## Biomathematics

**What is it?**
- An interdisciplinary math major with focus in biology that prepares students to pursue work in the pre-medical, computational biology, and bioinformatics fields.

**What will I study?**
- Algorithms for science applications, symbolic and numerical computations, bioinformatics, modeling in biology, and collateral science courses in chemistry, physics and genetics.

**What courses will I need before I start?**
- Calculus I
- Calculus II
- Calculus III
- Ordinary Differential Equations
- Scientific Programming
- 1 laboratory based science course

**Who can I contact for information?**
- Math Undergraduate Advising
  advisor@math.fsu.edu

## Chemical Science

**What is it?**
- A general study of chemistry that provides the knowledge to pursue graduate work, pre-professional work in forensics or crime scene investigation, or as preparation for teaching chemistry in K-12 schools.

**What will I study?**
- A broad study of required chemistry core-curriculum courses coupled with a year in college physics.

**What courses will I need before I start?**
- Calculus I
- General Chemistry I w/ Lab
- General Chemistry II w/ Lab
- Organic Chemistry I w/ Lab
- Organic Chemistry II w/ Lab

**Who can I contact for information?**
- Joshua Cummings, Coordinator
  jcummings@chem.fsu.edu

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Other majors you may want to consider: Computational Biology, Chemical Engineering, Environmental Chemistry, Meteorology, Food and Nutrition Science

Program information subject to change.

* denotes majors that are also available at the Panama City Campus. † denotes majors that are also available as Distance Learning.

Please refer to the FSU Academic Program Guide ([academic-guide.fsu.edu](http://academic-guide.fsu.edu)) and Match Major Sheets ([career.fsu.edu/resources](http://career.fsu.edu/resources)) for specific course numbers & more information.

*Effective Summer 2018*
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## CHEMISTRY

**What is it?**
- The experimentation and study of substance, and how it is composed, structured, reacts, and transforms.

**What will I study?**
- A broad core curriculum in chemistry: organic and inorganic, analytical, physical, physiochemical measurements and techniques, coupled with required collateral physics and math courses

**What courses will I need before I start?**
- Calculus I
- Calculus II
- General Chemistry I w/ Lab
- General Chemistry II w/ Lab
- Organic Chemistry I w/ Lab
- Organic Chemistry II w/ Lab

**Who can I contact for information?**
- Joshua Cummings, Coordinator  
jcummings@chem.fsu.edu

## PHYSICAL SCIENCE

**What is it?**
- A broad study of science that provides opportunity to explore both the natural and technological world.

**What will I study?**
- Interdisciplinary coursework options: meteorology, geology, chemistry, modern physics and astrophysics, computer programming, mathematics

**What courses will I need before I start?**
- Calculus I
- Calculus II
- General Chemistry I w/ Lab
- General Chemistry II w/ Lab
- General Physics A w/ Lab
- General Physics B w/ Lab

**Who can I contact for information?**
- Brian Wilcoxon, Program Advisor  
bwilcoxon@fsu.edu

## PHYSICS

**What is it?**
- A study of the physical properties of matter, energy, and the interactions between them.

**What will I study?**
- A traditional physics curriculum through mechanics and quantum mechanics, astrophysics, general and special relativity, particle and nuclear, condensed matter

**What courses will I need before I start?**
- Calculus I
- Calculus II
- Calculus III
- General Chemistry I w/ Lab
- General Physics A w/ Lab
- General Physics B w/ Lab

**Who can I contact for information?**
- Brian Wilcoxon, Program Advisor  
bwilcoxon@fsu.edu

## PHYSICS & ASTROPHYSICS

**What is it?**
- A specialized field of study in physics focused in astronomy.

**What will I study?**
- A traditional physics curriculum coupled with specialized coursework in radiation transport, extragalactic astronomy, cosmology

**What courses will I need before I start?**
- Calculus I
- Calculus II
- Calculus III
- General Chemistry I w/ Lab
- General Physics A w/ Lab
- General Physics B w/ Lab

**Who can I contact for information?**
- Brian Wilcoxon, Program Advisor  
bwilcoxon@fsu.edu

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