

SUSTAINABLE BIOMATERIALS

Fall/Spring Semester *Sustainable Biomaterials Science* Introductory Courses

Students to view the timetable for any of the classes follow:

https://banweb.banner.vt.edu/ssb/prod/HZSKVTSC.P_DispRequest

Set the "Subject" box to "SBIO" and click "FIND class sections" for the desired semester.

*To help you explore your interest in the **Department of Sustainable Biomaterials**, we recommend the following courses for the fall and spring semesters, depending on your area of interest*

Fall Recommendations

STRUCTURE AND PROPERTIES OF BIOMATERIALS (SBIO 2124)

Learn about the macroscopic and microscopic structure and chemical composition of wood and other biomaterials such as grasses, bamboo, corn stover, and bagasse. Study and experiment with relationships between anatomical structure and physical/mechanical behavior of materials. Learn how to identify commercially important biomaterials. Prepare and analyze microscope slides and scanning electron micrographs. Weekly lab. The pre-requisites for this course are CHEM 1035 and BIOL 1005.

Spring Recommendations

BEHAVIOR OF SUSTAINABLE BIOMATERIALS (SBIO 2384)

Physical properties of plant-derived materials and biobased polymer composites. Measurement techniques. Structure and influence on transport properties, response to heat, moisture, electricity, and light. The pre-requisites for this course are CHEM1035 and PHYS 2205.

SOCIETY, SUSTAINABLE BIOMATERIALS AND ENERGY (SBIO 3454)

Sustainability, raw materials and energy needs of society. Use of sustainable biomaterials to meet society's needs and reduce impact on environment. Methods to evaluate and certify the sustainability of materials and consumer goods. Carbon sequestration and the use biomass for energy. (3H,3C). No prerequisites.

For more information, please email one of our students at sbio@vt.edu.