Opportunities Week of 12-4-20

Online Winter Course in Machine Learning at SBU: This course (ESE 188: Understanding Machine Learning) **satisfies the SBC TECH Requirement** and is available online during Winter 2021 (Jan 5-23).
Please see the flyer attached below for more information if you are interested!

Online Winter Course in Nanotechnology at SBU: This is an introductory course to nanotechnology that requires no prerequisites! This is a three credit course and will be offered online during the winter session in asynchronous mode and **fulfills SBC TECH requirements.**
Please see the flyer attached below for more information if you are interested!

Grow More Foundation Spring 2021 Remote Internship Opportunity: Grow More is currently seeking students with an interest in applying biotechnology to solve real-world agricultural problems. Your aim will be to independently design experiments in gene editing or RNAi with the goal of contributing to Grow More's ENABLE program. You will research and defend plant genetic traits that could have a significant impact in developing countries. This internship will focus heavily on reading, discussing and presenting scientific literature with a team of like-minded peers. Though you will work independently, you are expected to be an active, communicative and contributing member of the team. Applicants must have a demonstrated history and experience in biotechnology and/or molecular biology.
If you have any questions or would like to apply for this internship, please email Matthew Venezia (mvenezia@growmorefoundation.org).
Apply now if you are interested!

Apply to the UB Climb UP: This is a paid undergraduate summer research experience! The CLIMB (Collaborative Learning and Integrated Mentoring in the Biosciences) Program at UB has created CLIMB UP for Summer Research, an outstanding summer research experience for undergraduate students to excel in biomedical, STEM, and health science research and explore career opportunities. Now entering its 13th summer, the overall goal is to introduce you to research opportunities, facilitate understanding of recent advances in the STEM disciplines, and mentor you towards graduate and professional careers. As a CLIMB UP Fellow, you will be guided through novel and exciting research projects and mentored by faculty, graduate students, and postdoctoral fellows through the summer and beyond. You will spend 10 weeks in the laboratory of your research mentor, whom you will be paired with based on your interests. We will train you in various areas necessary to safely and efficiently perform your research and related activities.
If you are interested, apply!!!
Access the online application here for more information!

Fred Hutch Summer Undergraduate Research Program: The Fred Hutchinson Cancer Research Center (Fred Hutch) hosts a summer internship that is designed to provide biomedical research experience and mentorship for undergraduate students of rising senior status. The Summer Undergraduate Research Program (SURP) is an intensive, 9-week internship designed to provide research experience and mentorship for rising-senior undergraduate students who are interested in biomedical research. Under the guidance of a faculty mentor, students will: Complete an independent research project; Attend weekly research seminars; Participate in professional development workshops designed to facilitate the preparation of competitive applications for graduate/medical school; and Present their findings at a competitive poster session.

Applications are due at 11:59pm on Friday, January 8, 2021 and Letters of recommendation for up to two references are due on Friday, January 15, 2021.
Access the application here

Winter Session 2021
Online Course
Satisfies SBC TECH Requirement

ESE 188: Understanding Machine Learning

Course Features
- An intuitive understanding of Machine Learning Principles
- Explore key concepts such as classification and prediction
- Exploratory Data Analysis and Visualization
- Practical examples from a wide range of disciplines.
- Course Credits: 3

Winter Session
Jan 5 – Jan 23, 2021

Faculty
Vibha Mane

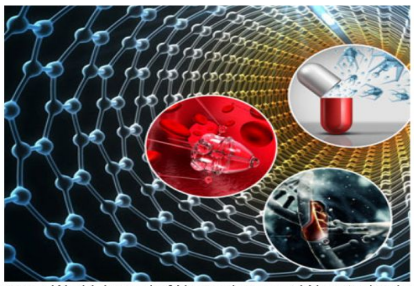
Stony Brook University
College of Engineering and Applied Sciences

CME 160: Introduction to Nanoscience and Nanotechnology

Winter Session 2021 : January 5 - 23, 2021

Undergraduate 3 credits

SBC: TECH



(source: World Journal of Nanoscience and Nanotechnology)

Many benefits of nanotechnology depend on the fact that it is possible to tailor the structures of materials at extremely small scales to achieve specific properties, thus greatly extending the materials science toolkit and realizing industrial applications that were not viable before. Using nanotechnology, materials can effectively be made stronger, lighter, more durable, more reactive, or better electrical conductors, among many other traits, with respect to their conventional counterparts.

This interdisciplinary course introduces nanomaterials and nano-fabrication methods. Applications of nanomaterials to composites, coatings, transportation, construction, electronics and biomedical engineering will be presented and connected to real-world technologies through applied case studies, several of them based on the instructor's own experience in materials industries. Basic concepts in nanomaterials design methodology and characterization techniques will be demonstrated through interactive discussion forums, a series of informative videos and a nanomaterials research project that will enable students to enter professional life with enhanced knowledge and technology skills.s

***Disclaimer: Undergraduate Biology does not endorse or take responsibility for any off-campus programs listed in Opportunities emails. While we do our best to vet any opportunity that is shared, please let us know immediately if you are suspicious of any employers/programs.**