

COURSE DETAIL

SYNTHETIC BIOLOGY

Country

Denmark

Host Institution

University of Copenhagen

Program(s)

University of Copenhagen

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

102

UCEAP Course Suffix**UCEAP Official Title**

SYNTHETIC BIOLOGY

UCEAP Transcript Title

SYNTHETIC BIOLOGY

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

Synthetic biology applies a novel conceptual framework in biology. By introducing engineering concepts, synthetic biology forms the basis for new developments in medicine, pharmaceutical science, plant biology, and material science. Fundamental technologies that are central to synthetic biology include: DNA synthesis, high-throughput genetic manipulation methods, facile access to off-the-shelf standardized biological parts and devices, parts registries, and computer-aided genetic design. Advanced tools that enable the integration of basic synthetic units into multi component devices are continuously being developed, and a variety of modern analytical techniques and computational tools are applied in the design and tests of new systems.

Language(s) of Instruction

English

Host Institution Course Number

LBIK10207U

Host Institution Course Title

SYNTHETIC BIOLOGY

Host Institution Course Details**Host Institution Campus**

Science

Host Institution Faculty**Host Institution Degree****Host Institution Department**

Plant and Environmental Sciences/Chemistry/Neuroscience and Pharmacology

Course Last Reviewed

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