

# 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 Campus**

Science

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

Plant and Environmental Sciences/Chemistry/Neuroscience and Pharmacology

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