

Opasraportti

Open University - Science (2015 - 2016)

Tutkintorakenteisiin kuulumattomat opintokokonaisuudet ja -jaksot

ay756347A: Conservation of biodiversity (OPEN UNI), 5 op
 ay752175P: Environmental ecology (OPEN UNI), 5 op
 ay771113P: Introduction to Geology I (OPEN UNI), 5 op
 ay780116P: Introduction to Organic Chemistry (OPEN UNI), 5 op
 ay765103P: Introduction to astronomy (OPEN UNI), 3 op
 ay750116P: Legislation in environmental protection (OPEN UNI), 5 op
 ay802158P: Mathematics for Economic Sciences (OPEN UNI), 7 op
 ay521260S: Programmable Web Project (OPEN UNI), 5 op
 ay806116P: Statistics for Economic Sciences (OPEN UNI), 5 op

Opintojaksojen kuvaukset

Tutkintorakenteisiin kuulumattomien opintokokonaisuuksien ja -jaksojen kuvaukset

ay756347A: Conservation of biodiversity (OPEN UNI), 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Intermediate Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

756347A Conservation of biodiversity 5.0 op

Assessment methods and criteria:

Read more about [assessment criteria](#) at the University of Oulu webpage.

ay752175P: Environmental ecology (OPEN UNI), 5 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

752175P Environmental ecology 5.0 op

ay771113P: Introduction to Geology I (OPEN UNI), 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

771113P Introduction to Geology I 5.0 op

ECTS Credits:

5 credits

Language of instruction:

Finnish

Timing:

1st year autumn

Learning outcomes:

Students have an understanding of the basic concepts of the Earth, from its composition and internal *structure* to the geological *processes* that has led to its evolution the present Earth as part of the solar system. They can tell how endogenic processes in the mantle and crust produce magmas and how magmas produce different igneous rock type upon emplacement below and on the Earth's surface. Students are able to recognise and classify common igneous rocks based on their mineral composition and are familiar with common metamorphic rocks and know the metamorphic facies concepts. They can relate deformation and metamorphism of the rocks to plate tectonic processes.

Contents:

Evolution of the Earth as part of the solar system, structure and composition of the Earth. Classification of igneous rocks, magmatism, origin and crystallisation of magmas, volcanism, metamorphism and formation of metamorphic rocks, plate tectonics and deformation structures.

Mode of delivery:

Face to face

Learning activities and teaching methods:

36 h lectures, 6 h exercises

Target group:

1st year geoscience students. The course is a good minor subject course for others.

Prerequisites and co-requisites:

Basic course in mineralogy (771102P) is parallel to this course.

Recommended optional programme components:

This course is intended as an introduction to the scope and methods of igneous and metamorphic petrology.

Recommended or required reading:

Martti Lehtinen, Pekka Nurminen and Tapani Rämö (1998) Suomen kallioperä – 3000 vuosimiljoonaa. Suomen Geologinen Seura, Gummerus Jyväskylä, ISBN 952-90-9260-1, Chapters 2-3. John Grotzinger & Thomas H. Jordan (2010 or 2014) Understanding Earth, 6th or 7th edition, Chapters 1-4, 6-7, 9-10, 12.

Assessment methods and criteria:

Written examination and identification test of rock types.

Grading:

5-1/fail

Person responsible:

Eero Hanski

Working life cooperation:

No

ay780116P: Introduction to Organic Chemistry (OPEN UNI), 5 op

Voimassaolo: 01.08.2015 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

780116P Introduction to Organic Chemistry 5.0 op

ECTS Credits:

5 credits /134 hours of work

Language of instruction:

Finnish. Book-examination in English as well.

Timing:

1st autumn and 1st spring

Learning outcomes:

After this course, the student can explain organic chemistry fundamentals, basic concepts and terminology, can use them for the description of organic chemistry phenomena. He/she can name organic structures, explain their properties, deduce basic reaction types and solve their mechanisms.

Contents:

Basic reactions of organic compounds, basic principles of stereochemistry and reaction mechanisms: Addition, elimination, substitution, including electrophilic aromatic substitution, reactions of carbonyl group. Applications.

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

42 hours of lectures plus 12 hours of exercises, 80 hours of independent self-study

Target group:

Biochemistry, Chemistry, Biology, Process Engineering, Environmental Engineering and in the study entity of 25 credits, compulsory. Physical Sciences, Geology, Geography, Mathematical Sciences, optional.

Prerequisites and co-requisites:

Upper secondary school chemistry

Recommended optional programme components:

The course is an independent entity and does not require additional studies carried out at the same time.

Recommended or required reading:

Hart, H., Hart, D.J. and Craine, L.E.: Organic Chemistry: A Short Course, 10 th ed. or the newer edition, Houghton Mifflin Boston, 1999; Hart, H., Hart, D.J. and Craine, L.E.: Study Guide & Solutions Book, Organic Chemistry: A Short Course, 10th ed. or the newer edition, Houghton Mifflin Boston, 1999.

Assessment methods and criteria:

Two intermediate examinations or one final examination Read more about [assessment criteria](#) at the University of Oulu webpage.

Grading:

The course utilizes a numerical grading scale 0-5. In the numerical scale zero stands for a fail.

Person responsible:

Dr. Johanna Kärkkäinen

Working life cooperation:

No

Other information:

No

ay765103P: Introduction to astronomy (OPEN UNI), 3 op**Voimassaolo:** 01.08.2012 -**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Open University, Oulu**Arvostelu:** 1 - 5, pass, fail**Opetus suunnattu:** Open University, Oulu**Opintokohteen kielet:** Finnish**Leikkaavuudet:**

765103P Introduction to astronomy 2.0 op

ECTS Credits:

3 credits

Language of instruction:

Finnish

Learning outcomes:

Student can describe by full sentences the role of astronomy in the formation of physical world view, can name the most central astronomical research subjects and can describe the proportions of the Universe.

Contents:

Basic level introduction to astronomical topics: history of astronomy, astronomical methods, the Solar System, the Sun, stars and their evolution, interstellar matter, star clusters, the Milky Way and galaxies.

Mode of delivery:

Face-to-face teaching

Learning activities and teaching methods:

Lectures 21 h, self-study 59 h

Prerequisites and co-requisites:

No specific prerequisites

Recommended or required reading:

Course lectured in Finnish, possible English study material will be decided later.

Assessment methods and criteria:

One written examination.

Read more about [assessment criteria](#) at the University of Oulu webpage.**Grading:**

Numerical grading scale 0 – 5, where 0 = fail

Person responsible:

Petri Kostama

Other information:<https://wiki oulu.fi/display/765103P/>**ay750116P: Legislation in environmental protection (OPEN UNI), 5 op****Voimassaolo:** 01.08.2014 -**Opiskelumuoto:** Basic Studies**Laji:** Course**Vastuuyksikkö:** Open University, Oulu**Arvostelu:** 1 - 5, pass, fail**Opetus suunnattu:** Open University, Oulu**Opintokohteen kielet:** Finnish**Leikkaavuudet:**

750116P Legislation in environmental protection 5.0 op

ay802158P: Mathematics for Economic Sciences (OPEN UNI), 7 op**Voimassaolo:** 01.08.2014 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

802158P Mathematics for Economic Sciences 7.0 op

ay521260S: Programmable Web Project (OPEN UNI), 5 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Advanced Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opettajat: Riekki, Jukka Pekka

Opintokohteen kielet: English

Leikkaavuudet:

521260S Programmable Web Project 5.0 op

Ei opintojaksokuvauksia.

ay806116P: Statistics for Economic Sciences (OPEN UNI), 5 op

Voimassaolo: 01.08.2014 -

Opiskelumuoto: Basic Studies

Laji: Course

Vastuuyksikkö: Open University, Oulu

Arvostelu: 1 - 5, pass, fail

Opetus suunnattu: Open University, Oulu

Opintokohteen kielet: Finnish

Leikkaavuudet:

806116P Statistics for Economic Sciences 5.0 op