Course Specifications
Valid in the academic year 2018-2019

Data Mining, Processing and Communication (C002798)

Course

Lecturers in academic year 2018-2019
Dhondt, Ineke
WE11 lecturer-in-charge
Bert, Wim
WE11 co-lecturer

Course offerings and teaching methods in academic year 2018-2019
A (semester 1)  English  seminar: practical PC room classes  25.0 h

lecture  12.5 h
guided self-study  8.75 h
self-reliant study activities  8.75 h

Offered in the following programmes in 2018-2019
International Master of Science in Agro- and Environmental Nematology  crdts offering 3 A

Course size (nominal values; actual values may depend on programme)
Credits 3.0
Study time 90 h
Contact hrs 55.0 h

Teaching languages
English

Keywords
Computer infrastructure, software, WWW, data-gathering and input, word-processing, spreadsheet, data presentation, information evaluation, presentation skills

Position of the course
This course starts in the beginning of the 1st year and continues until the end of the first semester.
This course provides basic knowledge on using computers and several software packages (bibliographic tools, Word, Excel, PowerPoint, R,..) allowing the student to search for, input, format, present and critically evaluate data.
The main objective is acquiring the ability to do independent and critical data management with appropriate scientific methods, to present data for a scientific audience and to evaluate published scientific papers.

Contents
Learning the basic operations of a computer, essential functions and troubleshooting.
The use of internet and intranet
Introduction in a wide range of bibliographic tools, and more extended focus on most important bibliographic tools
Critical analysis of scientific literature
Operation of word-processing and spreadsheet programs
Presentation of results: technical aspects (software) and attitude

Initial competences
Preliminary knowledge of computers and office-related software is helpful but not required.

Final competences
1 Master basic aspects of computer and internet use.
2 Efficiently retrieve appropriate scientific literature.
3 Evaluate scientific work on its relevance, accuracy and importance.
4 Gather and process scientific data.
5 Present results effectively and compresibly.

(Approved)
Conditions for credit contract
Access to this course unit via a credit contract is determined after successful competences assessment.

Conditions for exam contract
This course unit cannot be taken via an exam contract.

Teaching methods
Guided self-study, lecture, self-reliant study activities, seminar: practical PC room classes.

Extra information on the teaching methods
Short theoretical introductions with on-screen demonstrations, immediately followed by hands-on implementations. The complete course takes place in computer classes.

Learning materials and price
Cost: 10.0 EUR
English written notes (Syllabus), no mandatory books.

References

Course content-related study coaching
Group and individual assistance during the exercises and interactive support via Minerva.

Evaluation methods
end-of-term evaluation and continuous assessment.

Examination methods in case of periodic evaluation during the first examination period
Written examination with open questions, skills test.

Examination methods in case of periodic evaluation during the second examination period
Written examination with open questions, skills test.

Examination methods in case of permanent evaluation
Oral examination, participation, assignment.

Possibilities of retake in case of permanent evaluation
examination during the second examination period is possible.

Extra information on the examination methods
Written exam with open questions (minor part) and exercises with require the use of the computer (major part).

Calculation of the examination mark
Non-period bound evaluation (40%) and period bound evaluation (60%).
Non-period bound evaluation includes classroom exercises in constructively criticizing published papers and papers that are provided and evaluating their positive and negative attributes and their scientific value. It also consists of preparing a manuscript (including introduction with literature review, material and methods, results, discussion and reference list), a poster and an oral presentation of the same data.
Periodic bound valuation comprises limited theoretical questions and selected exercises. The final result is based on a combination of theoretical knowledge, results of the exercises, but mostly on the ability to show insight in the subject.
The score for the non-period bound evaluation remains valid for the second chance exam. Only the mark for the period bound evaluation can change.

(Approved)