UP

SKILLS

i.	**Name of the course**
	Deverbal derivations

ii.	**Level of the course**
	BA

iii.	**Workload**
	5 ECTS

iv.	**Institution**
	University of Graz

v.	**Course instructor(s)**
	Boban Arsenijević

vi.   Brief course description

The course focuses on the derivation of new words from verbal bases (i.e. on deverbal derivations). The main questions targeted are what morphological operations apply in deverbal derivations, what restrictions can be observed that are imposed by verbal properties such as aspect, argument structure or morphological make up, which among these operations are productive and how is the prosody of the derived words determined. The third step begins with the concrete research design: its adaptation to the topic of the course and to the available infrastructure. In the rest of the course, the students will pursue the research as designed, report the results and discuss them in the class, and finally write a seminar paper.

The course begins with a general introduction to the scientific method in linguistics in the first two weeks, and is then followed by three larger blocks. During the introductory block, the basic notions of lexical categories, properties of verbs and derivation are presented and discussed. They are brought in connection with empirical research methods.

The second block discusses the available infrastructure - in particular the database of Bosnian/Croatian/Serbian and Slovenian verbs that serves as the base or the course. The students get familiar with the retrieval of the databases, with the use of corpora to pursue further annotation of the databases and with rudimentary automatic retrieval and annotation. Statistical tests and tools available for their implementation are introduced, discussed and tried hands-on. The students begin conducting their empirical investigations, discuss their difficulties and experiences

The third part is entirely dedicated to the students' research projects. They continue with the empirical investigations, develop their databases including their own decisions about certain open aspects of their design, apply statistical analyses and discuss the resulting tendencies of certain classes of verbs regarding undergoing certain derivational operations. The students submit their preliminary drafts which are read before class and discussed in class. The lecturer also provides written feedback. After this, the students hold oral presentations of their projects. At the end of the course, the students submit their final research reports.

vii.   Research related subject
Morphological operations, verbal features

viii.   Data the students work with
Data obtained from corpora, data obtained from human subjects

ix.   Topics

A: Research design

A1: General research design

[Teaching materials]
UPSKILLS Moodle course First steps into scientific research
https://upskillsproject.eu/project/scientific_research/
Movetia/ReLDI courses:
https://phil.openedx.uzh.ch/courses/course-v1:PHIL+Movetia101+2046/info (in English)
https://phil.openedx.uzh.ch/courses/course-v1:PHIL+ReLDI101+2018/info (in BCMS)

A2: Adapting the general research design to the specific topic of interest

Decomposing derivations into the components of morphological operations (affixation, allomorphy, prosodic changes…), the semantic shifts, and the category change, where available; already annotated properties of verbs in the databases that the students work on
Representing these in terms of variables and levels, distinguishing between predictors and 'predictees'
Recognizing mutually dependent variables and discussing possible designs when no such combinations are included at the same time

A2.1: Formulation of questions and hypothesis in terms of variables

A2.2: Formulation of predictions of H0 and H1

A2.3: Selection of optimal research techniques, selection and creation of corresponding data sources
- Experimental paradigms (e.g., elicitation, judgements, forced-choice)
- Developing and exploiting databases and corpora (e.g. manual data annotation)

A2.4: Identifying the optimal data analysis method

A2.5: Inferring theoretical consequences from the specific data analysis results

A3: Adapting the research design to the available research infrastructures

Familiarisation with the databases, corpora and the script for retrieval

A3.1 Selection of optimal research techniques, selection and creation of corresponding data sources (see also A2.3)
- data compilation, data analysis;
- understanding, selecting and performing optimal statistical tests and models

A4: Research reporting

Identifying optimal formats for the representation of correlations between annotated properties of verbs and the derivational patterns they undergo

A4.1 Presentation modes for research reporting (short oral presentation, report, article etc.)

A4.2 Established procedures and conventions in research reporting, such as:
- the ordering of thematic units in an article/squib/report,
- organization of the presentation,
- amount of text and graphical items on a slide/handout,
- terminology,
- citing conventions

B: Infrastructures & techniques

B1: For obtaining literature

[GENERAL-PURPOSE REPOSITORY] ResearchGate, Googlescholar, Academia.edu, [DISCIPLINARY REPOSITORY] lingbuzz

B2: For obtaining, sharing and managing data

Annotating data in a database, both manually and automatically

B2.1: Definition of research infrastructures, and the main concepts around **data interoperability**, such as **data**, **metadata** and **standards**
B2.2: Platforms and repositories
B2.3: Identifying, collecting, creating and/or using relevant data for research projects ● Searching, identifying and selecting relevant corpora from language resources platforms and repositories hosting them ● Citing linguistic data sets as appropriate ● Familiarity with online survey tools

B3: For analysing data
Linear Mixed Effects Model and its fitting to the data. Issues with non-binary categorical predictor variables, using ANOVA instead
B3.1: Softwares for statistical tests
B3.2: Concordancers for the analysis of corpora

C: Subject-specific topics
C1: How properties of the base influence its derivational potential?
C2: What properties of the base can survive through morphological operations?
C3: What are the quantitative signatures of semantic and morphological relations?

x.   Learning outcomes

A: Research design
A1: Students will be able to make an overview of the general research design.
[Teaching materials] UPSKILLS Moodle course First steps into scientific research https://upskillsproject.eu/project/scientific_research/ Movetia/ReLDI courses: https://phil.openedx.uzh.ch/courses/course-v1:PHIL+Movetia101+2046/info (in English) https://phil.openedx.uzh.ch/courses/course-v1:PHIL+ReLDI101+2018/info (in BCMS)

A2: Students will be able to create a suitable research design for the specific topic of interest.

Students will be able to identify potentially relevant properties of the linguistic objects under study and formalize them as variables, listing their levels exhaustively and parsimoniously.
Students will be able to calculate the required amount of observations for reliable results.
Students will be able to retrieve the required amount of observations from the corpus and databases, and select and apply the appropriate statistical tests.

A2.1: Students will be able to formulate questions and hypothesis in terms of variables.

A2.2: Students will be able to formulate H0 and H1.

A2.3: Students will be able to select optimal research techniques, and create corresponding data sources
- Experimental paradigms (e.g., elicitation, judgements, forced-choice, self-paced reading)
- Developing and exploiting databases and corpora (e.g., manual data annotation).

A2.4: Students will be able to select and implement the optimal data analysis method.

A2.5: Students will be able to infer theoretical consequences from the specific data analysis results.

**A3: Students will be able to adapt a research design
to the available research infrastructures.**

Students will be familiar with the basic corpus linguistic tools,
Students will be able to assess the relevant properties of the available corpora / databases,
Students will be able to adapt the RD to the limitations of these infrastructures.

A3.1 Students will be able to select of optimal research techniques, select and create corresponding data sources (see also A2.3)
- data compilation, data analysis;
- understanding, selecting and performing optimal statistical tests and models.

A4: Students will be able to report on their performed research in accordance with standards and conventions in the field.

Students will be able to select the optimal format for the representation of the attestd interactions between verbal properties and each of the considered derivational patterns.

A4.1 Students will be able to select and implement different presentation modes for research reporting (short oral presentation, report, article etc.).

A4.2 Students will be able to implement established procedures and conventions in research reporting, such as:
- the ordering of thematic units in an article/report,
- organization of the presentation,
- amount of text and graphical items on a slide/handout,
- terminology,
- citing conventions.

B: Infrastructures & techniques

B1: Students will be able to identify and apply suitable infrastructures & techniques for obtaining literature.

[GENERAL-PURPOSE REPOSITORY] ResearchGate, Googlescholar, Academia.edu, [DISCIPLINARY REPOSITORY] lingbuzz, ROA.

B2: Students will be able to identify and apply suitable infrastructures & techniques for obtaining, sharing and managing data.

Students will be able to extract data from the available databases.
Students will be able to perform moderately complex searches of the available corpora.

B2.1: Students will understand what research infrastructures are, and the main concepts around **data interoperability**, such as **data**, **metadata** and **standards**.

B2.2: Students will be able to identify suitable platforms and repositories.

B2.3: Students will be able to identify, collect, create and/or use relevant data for their research projects
- Searching, identifying and selecting relevant corpora from language resources platforms and repositories hosting them
- Citing linguistic data sets as appropriate.
- Familiarity with online survey tools.

B3: Students will be able to identify and apply suitable infrastructures & techniques for analysing data.

Students will be able to use ANOVA and linear mixed model tests.

B3.4: Students will be able to select and use concordancers for the analysis of corpora

C: Subject-specific learning outcomes

C1: Students will be able to discuss how various properties of the base influence its derivational potential.

C2: Students will be able to predict whether a semantic property of the base will also be observable on the derived word.

C3: Students will be able to calculate the basic quantitative properties of morphological operations such as productivity or relative size of the base.

xi. Overview of evaluation	
Rubric	Weighing
Participation incl. homework (initiative, forward-thinking, problem solving, critical thinking, organisation, time management)	40%
Outputs based on the final research report ● oral presentation ● final written report	60%