# Detailed overview of learning outcomes per topic block in RBT courses

| A: Research design |
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| A1: Students will be able to make an overview of the general research design. |
| 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. |
| 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, computing inter-annotator agreement) |
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| 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. |
| 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, data archiving (e.g., XML, XLS), data reuse; * understanding, selecting and performing optimal statistical tests and models. |
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| A4: Students will be able to report on their performed research in accordance with standards and conventions in the field. |
| A4.1 Students will be able to select and implement different presentation modes for research reporting (short oral presentation, poster, squib, report, article etc.) |
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| 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/squib/report, * organization of the presentation, * amount of text and graphical items on a poster (including text size), * 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, Rutgers Optimality Archive. |
| B2: Students will be able to identify and apply suitable infrastructures & techniques for obtaining, sharing and managing data |
| 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.   * Understand the difference between **general-purpose repositories** and **disciplinary repositories**   + [GENERAL-PURPOSE REPOSITORY] Zenodo, FigShare   + [DISCIPLINARY REPOSITORY] CLARIN, The Language Archive |
| B2.3: Students will be able to identify, collect, create and/or use relevant data for their research projects   * Search, identify and select relevant corpora from language resources platforms and repositories hosting them   + [DISCIPLINARY REPOSITORY] CLARIN, ELRC-SHARE, the Language Archive. * Cite linguistic data sets as appropriate. * Deposit their research data in a **certified repository** of their choice and select an appropriate licence for sharing their data * Understand the **versioning** policy of the repository * Use online survey tools |
| B2.4: Students will be able to create a **data management plan**   * Understand the **data lifecycle** * Understand how to generate data, analyse and handle it * Understand the **legal and ethical issues** around data generation and use (e.g. licensing, GDPR compliance, anonymisation, the importance of FAIR principles and Open Access). * Know how to securely store and backup their research data * Know how to document their workflows and what metadata to use to describe the nature of the data based on existing standards. * Know what data needs to be destroyed, preserved in a data repository and made available for reuse. |
| B3: Students will be able to identify and apply suitable infrastructures & techniques for analysing data. |
| B3.1: Students will be able to select and use softwares for statistical tests |
| B3.2: Students will be able to select and use softwares for conducting a phonological analysis (e.g. Praat) |
| B3.3: Students will be able to select and use concordancers for the analysis of corpora |