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# Detailed overview of general topics in RBT courses

| A: Research design |
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| 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](https://phil.openedx.uzh.ch/courses/course-v1%3APHIL%2BMovetia101%2B2046/info) (in English)[https://phil.openedx.uzh.ch/courses/course-v1:PHIL+ReLDI101+2018/info](https://phil.openedx.uzh.ch/courses/course-v1%3APHIL%2BReLDI101%2B2018/info) (in BCMS) |
| A2: Adapting the general research design to the specific topic of interest |
| A2.1: Formulation of questions and hypotheses in terms of variables |
| A2.2: Formulation of predictions of H0 and H1 |
| A2.3: Selection of appropriate research techniques, selection and creation of 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: 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 |
| A3.1 Selection of optimal research techniques, selection and creation of 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: Research reporting |
| A4.1 Presentation modes for research reporting (short oral presentation, poster, squib, 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 poster (including text size),
			* amount of text and graphical items on a slide/handout,
			* terminology,
			* citing conventions
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| B: Infrastructures & techniques |
| B1: For obtaining literature |
| [GENERAL-PURPOSE REPOSITORY] ResearchGate, Googlescholar, Academia.edu, [DISCIPLINARY REPOSITORY] lingbuzz, ROA |
| B2: For obtaining, sharing and managing data |
| B2.1: Definition of research infrastructures are, and the main concepts around **data interoperability**, such as **data**, **metadata** and **standards** |
| B2.2: Platforms and repositories* + - G**eneral-purpose repositories** and **disciplinary repositories**
			* [GENERAL-PURPOSE REPOSITORY] Zenodo, FigShare
			* [DISCIPLINARY REPOSITORY] CLARIN, The Language Archive
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| 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
			* [DISCIPLINARY REPOSITORY] CLARIN, ELRC-SHARE, the Language Archive
		- Citing linguistic data sets as appropriate
		- Depositing research data in a **certified repository** and selecting an appropriate licence for sharing their data
		- The **versioning** policy of repositories
		- Familiarity with online survey tools
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| B2.4: **Data management plan*** + - Understanding the **data lifecycle**
		- Understanding how to generate data, analyse and handle it
		- Understanding the **legal and ethical issues** around data generation and use (e.g. licensing, GDPR compliance, anonymisation, the importance of FAIR principles and Open Access)
		- Secure storage and backup of research data
		- Documenting workflows and what metadata to use to describe the nature of the data based on existing standards
		- What data needs to be destroyed, preserved in a data repository and made available for reuse
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| B3: For analysing data |
| B3.1: Software for statistical tests |
| B3.2: Software for conducting a phonological analysis (e.g. Praat) |
| B3.3: Concordancers for the analysis of corpora |