

# OBO Academy: Training materials for bioontologists

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## INTRODUCTION

Hundreds of biomedical ontologies exist and are currently under development, however there is a distinct lack of training material and educational resources on how to create, develop, edit and maintain biomedical ontologies using current tools and best practices. Many ontology developers and curators are trained ad hoc and have not undergone any formal education on ontology development. Additionally, this presents a challenge for current ontologists and new ontologists entering the field to formally learn new skills and workflows. The OBO Academy is an effort to develop open, freely available training materials, provide formal documentation on ontology workflows and provide ongoing training for the OBO community. Below we describe our approach to developing these training materials with the goal of training future and current bio-ontologists in current methods and best practices.

## APPROACH

The offerings from the OBO Academy are available here: <https://oboacademy.github.io/oobook/>. The online materials are intended to be self-paced learning materials and are organized into:

- **Tutorials:** learning-oriented material that contains exercises to help learners achieve basic competence in a specific area.
- **How-to guides:** task-oriented guides that function as directions for specific tasks.
- **Reference guides:** information-oriented documentation that describes a single topic in a succinct, technical and orderly way.
- **Explanations:** understanding-oriented documentation that clarifies, deepens and broadens the reader's understanding of a subject.

These are based on the Diátaxis framework (<https://diataxis.fr/>). Additional tutorials and lessons are under development and we welcome input from the community to iterate on existing material or share new material. As part of the online materials, we are developing *pathways*, which are curated training materials that provide a linear path for learners working in a specific role. Two pathways are under development, one for Ontology Curators and one for Ontology Engineers/Developers.

The materials are iteratively being developed, with new content being added upon request. The OBO Academy is intended to be community driven, where any of our community members can provide content for the online materials. The materials are continuously updated and feedback and edits via GitHub pull requests are welcome from the community (<https://github.com/OBOAcademy/oobook>). A guide on how to edit the training materials is available on our site under OBOOK Editors and here: <https://oboacademy.github.io/oobook/contributing/>.

## CONCLUSION

Our aim is to create a centralized resource with training materials from various sources, and iteratively improve the content, which is under development and continuous revision. For more information or to get involved, please create an issue on our GitHub tracker (<https://github.com/OBOAcademy/oobook/issues>) or view our contributing webpage (<https://oboacademy.github.io/oobook/contributing/>).