

A short guide to the PhD study at the Department of Botany

Preamble

This document is meant primarily for Ph.D. newcomers to the Department irrespective whether they speak Czech or not; it is in English just for sake of simplicity (so that we do not need to have two versions of essentially the same text). Any comments (structure, omissions, inconsistencies, errors) to it are appreciated.

Ph.D. study

Beginning of the study

The study begins with an enrollment ("zápis") which takes place at the Department of Student Affairs ("studijní oddělení", located in the small building at the entrance to the Botanical Garden).. A key thing to be done shortly afterward is the completion of the personal study plan ("Individuální studijní plán"). This is a document detailing main background, questions, methods and expected outcome of the Ph.D. project, together with expected time schedule of the work. It is helpful if the document is sufficiently detailed – it can give the study board better understanding of your planned project, its timing and expected outcomes. A short description how this document might look like is in a separate guide (see the links below). This has to be submitted through the SIS (Study Information System/Studijní informační systém).

The key person for any Ph.D. study is supervisor ("školitel"). This is the person who is in charge of your study, proposes the Ph.D. project, helps you to outline the study plan. Before the formal enrollment, the supervisor has to announce a new Ph.D. project into the SIS; only after then the student can link their enrollment to such Ph.D. project. At the end of each academic year, he/she assesses progress in the project and reports to the Ph.D. study board. He/she is also a member of the general Ph.D. examination committee.

The study plan has to be approved by the Ph.D. study board ("oborová rada"). This happens typically in November after you submit the study plan in the SIS; it is automatically forwarded to the supervisor. Supervisor may return the study plan or submit it with comments to the study board. You may expect feedback from the study board, potentially asking for some amendment/additional details to your proposed study plan. Later changes to the study plan (during the course of the study) are possible, but not always appreciated.

There are no obligatory courses for Ph.D. students. It is up to the supervisor and the Ph.D. study board to recommend courses to be taken by individual students. There is a range of courses that are advisable (discuss with your supervisor), some of them highly advisable (but this depends on the subject of your research). It is important to note that once a course is made a part of the study plan, the students must pass the exam before the general examination. (Several general courses are listed in the table below.) Apart from regular courses, it is highly advisable to take part in the seminars, both the "big" Departmental seminar (for the whole Department) and the small "after-

seminars" (or "poseminár" organized by individual Departmental units). This will provide overview both of the topics dealt with by individual groups in the department, and will generally help with networking.

Presentations to be delivered during the study

In the first semester of the study, Ph.D. students are expected to present an outline of their Ph.D. project at two presentations, each with different form and different audience.

First, there is a presentation at the after-seminar of the unit you are working in (Mycology, Plant Ecology/Geobotany, Vascular Plant Evolution and Diversity). This presentation (ca 25 mins, although individual units may have slightly different rules) should show the basic context, questions, techniques and expected outcomes of the Ph.D. project. This seminar is fairly informal as it is given to a smaller audience, but it is the place for a thorough discussion including technical details, which may not be of much interest/understanding for a larger audience at the seminar of the whole department.

Second, students are expected to present their PhD project in their first year of the study also at the large Departmental seminar. A form of this seminar may change between years, but at present we organize this as a poster session, at which students present a poster (no need of graphical perfection; content is important) showing the essence of the project understandable to a general department audience, again showing general background questions and aims, methods to address these aims and expected outcomes of their Ph.D. project. In addition to this, students give a very short ("flash") presentation of the topic of their study, as a kind of an advert of their poster. This permits everybody from the department to (i) learn about their topic, and (ii) provide feedback, which may differ from the feedback one gets from people working of closely related topics studied within the same unit.

During the following years of the study, students are expected to give progress reports at the after-seminar of the respective unit, typically in the winter semester (but this again depends on the organization of each unit).

During the third year of the study, the students are expected to give a presentation of the progress on their Ph.D. project at the "big" Departmental seminar. The length of such presentation is 20 min with 10-15 min for discussion. It is important to keep in mind that this presentation is again for a larger audience, including people from other units and also master (and even bachelor) students. Therefore, it is important to make clear why your topic is interesting and worth studying in a short introduction (i.e. what is known in the field, what is not known, and why it should be known). After that, it is time to outline your aims and hypotheses, which methods/approaches you are using and why they are good for answering the research questions. When showing the results, it is important to discuss what they mean (in the light of the preceding point) and discuss the future prospects of the study: what is the plan for the final phase of the study and why, and how it is related to what has already been known in the discipline. A list of planned papers is also an essential part of the presentation, together with info on their status (in preparation, submitted, in revision etc.). It is advisable to bring already published papers/manuscripts and posters to show to the audience.

In addition to these presentations, students may optionally take active part in teaching and either take part or even lead courses (including field courses) for bachelor and master students. This has

both pros and cons: it helps Ph.D. students to work with a group of younger students, to organize their thoughts on a particular subject (and provide some extra money for themselves) and provides teaching experience which is a valuable part of a researcher's CV. On the other hand, it is also likely to take your time that you can devote to the study and distract you from your Ph.D. project. If you are interested, please discuss it with your supervisor and the head of the unit beforehand; they will also recommend you good candidate courses.

Yearly reports

Students submit a report on their study progress through the SIS each year, typically in September (dates may vary between years). Here the students describe progress on their work on the Ph.D. project, and provide list of the exams passed, references on conferences attended with active presentations, details on manuscripts written, submitted or accepted and courses taught. It is advisable to provide sufficient detail on your work progress, both on the Ph.D. project and associated activities. The report is submitted through the SIS first to the supervisor. It is advisable to discuss the report with the supervisor first, so that you avoid the return of the report for re-writing. Part of the report may be filled as a text, part is coupled with other modules in the SIS, where your exams and longer-term study stays abroad are recorded. The system has its drawbacks, but it is generally easy to understand if you are patient and tolerant.

The assessment of the report is done by the Ph.D. study board – each student is having three people assessing the report (supervisor among them). This three-member committee provides a critical feedback in form of a written statement and a grade. Students are graded A-B-C; as a rule, students failing to have a submitted paper by the third year of their study are unlikely to be graded A (the best grade; C meaning fail).

Importantly, the report after the first year of study is discussed with the committee in person. Positive assessment of this report and the discussion is a necessary condition for the continuation of the study; if there is not sufficient substance in the first year report, student fails to explain background, aims and hypotheses, the approaches used and outline interpretation of the results, the committee will propose termination of the study.

There are also other systems besides the SIS that you may need for specific applications – Webapps allowing you to apply for a grant project of the faculty (see below), CIS allowing you to manage your grants and also OBD database gathering all published papers (currently maintained by Michal Štefánek from the Department).

General examination

The General examination ("final state exam", "státní doktorská zkouška") takes place in the second year of the study, typically in (3rd-) 4th semester. At the exam, held in a form of an interview with the committee, the student should be able to demonstrate (i) general overview of the discipline of botany and (ii) detailed knowledge in the field of their doctoral project. Before the exam, students are expected to submit a written summary of their work on the project, including a background/context of the research, description of the progress on their project, and an outlook. This summary should be submitted to the committee chair no later than two weeks before the examination.

As a part of the application to the exam, the students should indicate three subjects in which the examination; two of these are "Botany" and "Doctoral project"; the third one should specify the field of interest in which students like to demonstrate their knowledge. It is usually taken from the following list: Phycology, Mycology, Lichenology, Bryology, Phytopathology, Ecology of Algae, Fungi Ecology, Lichen and Bryophyte Ecology, Vascular Plants Systematics and Evolution, Biosystematics, Reproductive biology, Molecular techniques in systematics and evolution, Numerical methods in taxonomy, Vegetation of Central Europe, Plant ecology, Biomes of the Earth, Plant community ecology, Paleoecology, Plant population biology, Phytogeography.

The examination committee usually has five members, with at least one from a unit with which the student is not associated and one external specialist from the field, i.e. usually outside the Department. The exam is graded as passed/did not pass. If the student fails the exam, the examining committee will recommend the study areas and literature to be paid attention to and student is expected to retake the exam in a next possible term.

The students apply for the final state exam at the Department of Student Affairs themselves using a rather obsolete, but still widely used paper form. Students may apply any time in the second year (but sufficiently early that the exam can take place before the end of the second year); however it is advisable that students in the same field coordinate their applications so that several exams can take place in one day. It may be worth noticing that the monthly stipend is raised after one passes the exam. It is welcome that students contact the study board informally to arrange for the approximate date of the exam (if possible we always try to make the date of the exam to be convenient both for the examination committee and the students).

Structure and working of the department

Structure and people at the department

Department of Botany has five "Units" ("oddělení"), each consisting of several working groups. These units are more or less informal groupings of people that share similar research topics and these are e.g. expressed in separate subprograms in master studies. Each of the units meet regularly in a separate after-seminar. These units are: Unit of Vascular Plant Evolution and Diversity, Geobotany/Plant Ecology, Phycology, Mycology and Bryology+Lichenology.

Ph.D. students, in contrast to master students, are not formally associated with any of these units, but for practical purposes each Ph.D. student has to choose which of the after-seminars they want to attend.

The Department of Botany is led by the Chair of the Department (currently Ondřej Koukol from the Mycology unit) and their deputy (currently Pavel Škaloud from the Phycology unit). You will need their signatures for a number of administrative forms (work contracts, most accounting documents, etc....). The Department Chair is advised by an informal advisor group of heads of the units and people responsible for Master and Ph.D. programmes ("vedení katedry"). The Department of Botany is one of the eleven departments grouped in the Biology Section (headed by the Associate Dean for Biology). The Faculty of Science has four such sections (Biology, Chemistry, geology and Geography) and is managed by the Dean with his office ("děkanát") and

is one of the 17 faculties of the Charles University (which is managed by the Rector with his office ("rektorát").

The key person at the Department is, as in any other department in the world, the secretary, currently Viera Mrázová, who is having her office on the first floor at the very end of the corridor. She knows the inner working of the Department (and of the Section and Faculty) and will be able to help you in most situations concerning administration, or at least will know who else can help you. (Study matters however should be dealt directly with the Department of Student Affairs, "studijní oddělení".) Another important person is Michal Štefánek, who is in charge of the SIS-related affairs of the Department and database of publications originating at the Department (OBD), etc. Web administrator of the Department is currently Vojta Zeisek.

The Ph.D. study is organized by the Ph.D. study board ("oborová rada"), which is responsible for the Ph.D. program at the department. Its current chair is Tomáš Herben. It sets the area-specific rules for the Ph.D. study (including, e.g., extent and structure of the thesis) and is responsible for the accreditation of the programme by the education ministry. It appoints committees for yearly assessment of the study progress, for the Ph.D. general examination and for the Ph.D. defences.

Seminars and other networking opportunities

The major organizing events of the whole department are the Departmental seminars, which take place (during semester only) on Tuesdays at 3 pm. We typically invite several speakers from abroad every semester (often people collaborating with one of the working groups at the department, or serving as PhD referees, but not limited to these); further we have presentations of the research conducted by the department members (at least one a semester), PhD student presentations (see above) and master student poster sessions. The seminars are generally in English; we make rare exceptions when we believe that using Czech would suit the topic/presenter/discussion better, but generally this does not happen more often than once a semester. Some of the Departmental seminars are shared with other departments, most commonly with the Department of Ecology; once a semester we also run a minisymposium with four speakers from Departments of Ecology, Zoology and Botany.

Every Tuesday at 2 p.m. we meet for a "coffee break" ("koblíhy") in the Seminarium (the small seminar room at the third floor), to meet across the entire Department and discuss informally any research-, study- or organization-related topic (of course this does not preclude you having smaller coffee breaks any other day as well :-). Everybody is welcome to this event. These coffee breaks run through the whole year, although the attendance tends to be much lower in summer.

After the Departmental seminar there are "after-seminars", organized at the level of individual units. Here we discuss namely progress in Master and Ph.D. theses; as the structure and customs for these seminars slightly differ among individual units, it is advisable to talk to the person who is responsible for their programme at the unit which you would like to be associated with (typically the unit with which your supervisor is associated). Some units continue informal discussions from the small seminars in a pub, where quite often the most important issues are raised and discussed; it is therefore advisable namely for presenting students to take part. Some groups organize also external seminars/outings, i.e. events organized outside the department at e.g. the field station of the Department.

There are formal Departmental meetings several times a year. These are mainly meant to inform on major financial, teaching and organizational matters. PhD students are welcome there. (It is generally held in English, with the exception of some agenda associated e.g. with teaching for Bc. students.)

Highlights of the departmental life are Master and Ph.D. defences. These show the range of student research done at the Department and provide great forums to discuss science among the department members and others. (It is highly advisable to take part.) Master defences take place typically twice a year (early June and early September; sometimes also early February), while PhD defences can take place any time of the year. Master defences are usually in Czech (in English only when the student wishes), while Ph.D. defences are always in English.

Each unit maintains its own email conference. It is important to be a member as most important announcements come through it. Further, there is a general conference of all employees of the Department; Ph.D. students become members by default, other students only when they are employed by the university (e.g. through research grants). This e-mail conference is used mainly to inform about urgent issues, upcoming events, etc.

Further networking opportunities are provided by a mentoring course (<https://is.cuni.cz/studium/predmety/index.php?do=predmet&kod=MB120C52>) organized by Martha Kandziora.

The Department has a close collaboration with two institutes of the Czech Academy of Science, namely the Institute of Botany (based at Průhonice, which is a settlement close to Prague) and Institute of Microbiology (based at the Krč district of Prague). These are non-university research institutes with large staff and fairly extensive infrastructure; as a number of department members are associated (or employed) with the Institutes, there is a potential for collaboration and access to the infrastructure there. Specifically, every year the Institute of Botany funds a certain number of Ph.D. positions available to students whose supervisors are associated with the institute; check with your supervisor whether this scheme would be available to you. Similarly, further facilities (imaging, OMICS) are accessible in the BIOCEV (based at Vestec, another settlement close to Prague), which is a joint institute of several faculties of the Charles University and Czech Academy of Sciences.

Funding opportunities for students

Research money

While many students have their research supported through research money of their supervisor or other lab member, there are several funding schemes available directly to students applying as principal investigators.

The most important is the Grant Agency of the Charles University (GAUK; link in the table below), which has a decent budget permitting two-digit success rate. It funds up to three-year projects covering consumables, travel and similar research costs including moderate stipends (both for applicants and their student collaborators). One can apply (depending on the needs of

the project of course) for a budget up to several hundred thousand CZK. Applications are submitted by students themselves; they need to have a mentor from the department staff (does not need to be the supervisor, but in most cases will be). Information is available at the University portal (see the table below). Submission deadlines are in autumn (early November–check the GAUK page); results are known in March. The funding is available immediately for the current year (plus two additional years if part of the application, subject to positive review of the yearly report). As the only outcome of the grant accepted by the agency (and allowing to apply for another grant) a publication in a journal with a IF from Web of Science.

For co-funding (up to 50% of the cost) of medium-term stays in labs abroad (typically several months), there is a university Mobility Fund ("Fond mobility") which has calls twice a year. Travel to a number of universities abroad can be also funded through the ERASMUS+ network; currently the Department has agreements with numerous universities, but agreements arranged by other departments or completely new ones are also possible. While ERASMUS+ is typically meant for a semester-long Study stays of bachelor and master students, many of our existing agreements cover also shorter Student trainings that are ideal for Ph.D. students. (Links to these programmes in the table below.)

Depending on the target country or field of study, there are further, but less regular sources appearing now and then announced by the university and external bodies. The announcements are primarily announced through the botany email conference; they are also available on the students' web or the "Aktuality" section of the Department web pages.

Stipends

All students get a basic stipend of (currently) 10 500 CZK (not taxable), which is increased to (currently) 12 000 CZK after successful passing the general examination. Many students are further funded by research money of their supervisors, either through irregular stipends (which are not taxable too) or through regular employment contracts (which are taxable, but cover health insurance which stipends do not). Alternatively, there is an additional support scheme by the department, which gives further (currently) 6 000 CZK (in the first and second years) and 5000 CZK (in the third and fourth years) to each student not supported by the supervisor's grant or similar funding. In the third and fourth year, this support by the department is conditional on submission of a first-author paper which will be a part of the dissertation. GAUK projects also allow a certain sum to be used for student's stipend.

PhD thesis and defence

Expected form of the thesis

The expected form of the dissertation is a collection of at least three thematically related publishable manuscripts written in English in the format of scientific articles and accompanied by a broader unifying introduction to the subject. In all these manuscripts the candidate must

have a major contribution. All of them must be of reasonable scope in terms of scientific questions asked and must bring an original, significant scientific contribution to the field. At least one of these articles must have been published or accepted for publication in a respectable scientific journal and its acceptance must be credibly documented. All articles must be related to the dissertation topic. In justified cases, the dissertation may take the form of a complete scientific monograph, which must be first-authored by the student and accepted for publication.

The introduction must be a substantial part of the thesis (the length of an average article) and must thoroughly introduce the framework and context of the topic, the aims of the thesis, questions asked and place the individual articles in the context of the discipline. The thesis must also include a broader summary of the significance of the results of the thesis to the discipline, either as the final part of the introduction or in a separate conclusion chapter.

The dissertation is submitted through the SIS; one printed copy is submitted together with the electronic submission. Referees get electronic copies only; in case some of them need a printed copy, it is then customary that the student makes an extra copy.

Before the formal defence, the dissertation is read and checked by a three-member "reading committee" (appointed committee chair plus two other members of the defence committee). Its recommendation is necessary for the defence; if the thesis fails to meet general requirements, the committee may return the thesis back to the candidate for improvement (in most cases, this concerns the introduction of the thesis). Formally, the reading committee checks the thesis after the formal submission; however, most students opt for submitting the thesis informally to the reading committee before the formal submission. It is therefore highly recommended to contact the Ph.D. study board before you formally submit the thesis, so that the reading committee can read it before the formal submission. This makes the whole process smoother, both for the candidate and for the committee. It is strongly advised to follow the recommendations of the committee; if you disagree with some points they raise, please approach the committee chair to clarify the matter.

Defence

Dissertation defences are highlights of the departmental life – these are public events, which may take place any time of the year, but most commonly in September. All defences are in English. It is highly advisable to attend Ph.D. defences of other students in order to see how the whole procedure looks like and to support candidates (and, of course, to learn more about the topics studied at the Department).

Each thesis is reviewed by two referees, at least one of them from abroad. The referees submit a written assessment of the thesis, which should be available to the candidate at least 2 weeks before the defence.

Each defence begins by a brief (often informal) introduction of the candidate by their supervisor. Then the candidate presents the thesis (ca. 25-30 mins). After that, both referees present a short summary of their reviews and examine the candidate by asking specific questions to the thesis. They are asked to begin with the questions from the written assessment (as a warm-up), but advised to continue to additional questions as the discussion develops. After the referees' questions (which take more than one hour in most cases), the committee chair opens general

discussion, with questions from the committee members and from the auditorium. After the defence is over (usually after two hours), there is a closed session with committee members, referees and supervisor taking part. At the beginning of the closed session, the referees summarize their opinion on the thesis and performance of the candidate. The committee members decide on the outcome (passed/not passed) by secret ballot. Finally, the result is publicly announced to the candidate and to the auditorium. Apart from the result (passed/not passed), the committee chair points out strong/weak points of the thesis as discussed at the closed session. There is a special grade for exceptionally good theses ("cum laude"); this is proposed by the defence committee, approved by the Dean of the Faculty and presented to the student at the final ceremony as an addendum to the diploma. Exceptionally good theses may be suggested for the Dean prize and awarded with moderate prize money. Final graduation ceremony ("promocce") is organized by the Department of Study Affairs and takes place in the medieval center of the university (Karolinum) in the Prague city center.

Typical Ph.D. study time course (formal/administrative events only)

Year 0	
April	Ph.D. application
June	admission exams
September	enrollment at the Study Department
Year 1	
October-November	completion of the Ph.D. study plan
November	approval of the Ph.D. study plan by the Ph.D. study board
autumn	presentation of the Ph.D. project at the small seminar of the unit
Autumn or (less likely) spring	presentation of the Ph.D. project at the Departmental seminar (typically a poster session)
September	report after the first year of the study submitted
Year 2	
October	discussion with the committee appointed by the study board on the report after the first year (in person)
November	feedback on the report by the study board (written)
autumn	discussion of the progress in the Ph.D. project at the small seminar of the unit
winter-spring-summer	general Ph.D. examination (interview)
September	report after the second year of the study submitted
Year 3	
November	feedback on the report by the study board (written)
autumn	discussion of the progress in the Ph.D. project at the small seminar of the unit
autumn or spring	presentation of the progress at the seminar of the department
September	report after the third year of the study submitted
Year 4	
November	feedback on the report by the study board (written)
autumn	discussion of the progress in the Ph.D. project at the small seminar of the unit
September	report after the fourth year of the study submitted
September	submission of the thesis (in an ideal world)

NB. Academic year begins in October. Currently it is possible to start PhD study beginning with the spring semester, i.e. in March; then the all dates here are shifted by half a year.

People

Department Head	Ondřej Koukol	ondrej.koukol@natur.cuni.cz; Benátská 2, room number 83
Chair of the Doctoral programme board	Pavel Škaloud	skaloud@natur.cuni.cz; Benátská 2, room number 78
Department Secretary	Viera Mrázová	viera.mrazova@natur.cuni.cz; Benátská 2, room number 73
Department of Student affairs (CZ)	Věra Šmídová	vera.smidova@natur.cuni.cz; at the entrance to the Botanical Garden, 2 nd floor
Department of Student affairs (EN)	Valerie Havrdová	valerie.havrdova@natur.cuni.cz; at the entrance to the Botanical Garden, 2 nd floor

Resources

SIS (CZ/EN)	is.cuni.cz/studium/index.php
Department of Botany (CZ/EN)	www.natur.cuni.cz/biologie/botanika
Ph.D. study page of the Department (CZ/EN)	www.natur.cuni.cz/biologie/botanika/studium/doktorske-studium
Study plan (CZ)	www.natur.cuni.cz/biologie/botanika/studium/doktorske-studium/zasady-pro-plan-doktorske-prace
Study plan (EN)	www.natur.cuni.cz/biology/botany/study/phd-study/guidelines-for-the-doctoral-work-plan
Written summary for the general examination (CZ)	www.natur.cuni.cz/biologie/botanika/studium/doktorske-studium/zasady-pro-pisemny-material-predkladany-k-doktorske-zkousce
Written summary for the general examination (EN)	www.natur.cuni.cz/biology/botany/study/phd-study/guidelines-for-written-material-submitted-for-the-doctoral-examination
Manual for supervisors (CZ)	www.natur.cuni.cz/biologie/botanika/studium/doktorske-studium/manual-pro-skolitele-doktorskeho-studia-botanika/view
UK manuals for PhD study (EN)	cuni.cz/UKEN-191.html
Faculty manuals for PhD study (mainly CZ)	https://www.natur.cuni.cz/fakulta/studium/phd/navody
Paolo Bartolic's practical guide for beginning Ph.D. students	paolobartolic@gmail.com
Rules for stipends from the department	www.natur.cuni.cz/biologie/botanika/studium/doktorske-studium/navyseni-stipendii-studentum-doktorskeho-studia/view
studentsky web PrF	web.natur.cuni.cz/student/domovska-stranka (currently in Czech only)
GAUK	cuni.cz/uken-753.html (main page in Czech, but easily identifiable links to English pages)
Mobility fund	cuni.cz/UK-357.html (unfortunately in Czech only)
ERASMUS network	www.natur.cuni.cz/fakulta/studium/studium-v-zahranici/erasmus/BS/prehled/#BIO ; search for entries of "botanika"

www.natur.cuni.cz/eng/study/erasmus?set_language=en

Some courses Ph.D. students

Course code	name			Teachers	Link
MB120P163	Biostatistika a plánování ekologických pokusů	CZ	winter	Zdeněk Janovský a kol.	is.cuni.cz/studium/predmety/index.php
MB120P102	Biostatistika II	CZ	winter	Tomáš Herben, Zuzana Münzbergová	is.cuni.cz/studium/predmety/index.php
MB120P174	Biostatistika III – Seminář pokročilých statistických metod	CZ	summer	Zdeněk Janovský a kol.	is.cuni.cz/studium/predmety/index.php
MB120C15E	Flash R course	EN	winter	Martin Weiser	is.cuni.cz/studium/predmety/index.php
MB120P164	Používáme R	CZ	summer	Adam Klimeš	is.cuni.cz/studium/predmety/index.php
MB120P161	Příprava publikací v ekologii a evoluci rostlin	CZ	summer	Tomáš Herben, Patrik Mráz	is.cuni.cz/studium/predmety/index.php
MB120C15	R bleskově	CZ	winter	Martin Weiser	is.cuni.cz/studium/predmety/index.php
MB120P147E	R for life	EN	winter	Martin Weiser	is.cuni.cz/studium/predmety/index.php
MB162P13	R pro život	CZ	winter	Martin Weiser	is.cuni.cz/studium/predmety/index.php
MB120P173	Skills in pedagogy, communication and self confidence in science	EN	summer	Clément Lafon Placette	is.cuni.cz/studium/predmety/index.php
MB120C77A	Zpracování a prezentace dat v ekologické a evoluční biologii	CZ	winter	Pavel Škaloud	is.cuni.cz/studium/predmety/index.php

MB120C52	Peer-Mentoring Program	EN	both	Martha Kandziora + several teachers	is.cuni.cz/studium/predmety/index.php
ENKACA	Academic writing (úroveň B2,B2+)	CZ	both	several teachers	www.natur.cuni.cz/fakulta/studium/czv/programy/zajmove/anglicky-jazyk
ENKACA	Academic writing (level B2,B2+)	EN	both	several teachers	www.natur.cuni.cz/eng/study/student/llp/english-courses
CZVEN	Anglický jazyk (úroveň K1 - K7)	CZ	both	several teachers	www.natur.cuni.cz/fakulta/studium/czv/programy/zajmove/anglicky-jazyk
CZVEN	Anglický jazyk (level K1 - K7)	EN	both	several teachers	www.natur.cuni.cz/eng/study/student/llp/english-courses