



FACULTY
OF SCIENCE

COURSE ANALYSIS

Date 2021-03-11

Department of Biology
Education- Bachelor's and Master's
level

Main Teacher: Eran Elhaik
Number of students: 22
Number of answers: 17
Grades: Fail (U), Pass (G), Pass w
distinction (VG).

Course Analysis BINP16 Programming in Python, autumn 2020

Summary of the course evaluation

Number of answers: 17

Short summary of the result: BINP16 was the first course in the MSc program to be taught online following covid-19 while providing class support (which dwindled and eventually ended as the situation worsened). Thereby, we were in the unfavorable situation where the most challenging course in the program had to be transitioned to a new environment. Adding to that uncertainty, BINP16 has been redesigned to address previous feedback and improve the training of the student.

Overall, the students were pleased with the course (Overall average 2.9) and were very satisfied with how the covid-19 adjustment has been performed and worked (Overall average 3.9). The students especially appreciated that it was possible to successfully complete the course work entirely online (after the adjustment period). The communication with the teachers (Overall average 2.9) and the high level of support for the course were appreciated (Overall average 3.8). They appreciated the breakdown between the teaching forms (Overall average 3.2) and the course literature (Overall average 3.9).

The student found the level of the course appropriated (Overall average 2.9) and highly appreciated their improved coding knowledge (Overall average 4.5) and other training (Overall average 3.9). This impression was reiterated in later

conversations (11/3/2021) during BINP29, as the students produced much stronger programming projects than in previous years.

The redesign of the course coupled with the pandemic had several undesirable outcomes. The course load increased (10/17 of the students reported working >50 hours per week) and the students were unhappy with the work-load (13/17 reported high load). Using quizzes (as a means to evaluate knowledge in an environment where students are represented by black squares) caused stress to some students, although the students voted to keep them. Consequently, the course got more complaints than in previous years.

While student satisfaction is, of course, very important and desirable, it is also important to emphasize the impossible teaching environment in which students closed their cameras for the entire term and teachers teach black squares. There is no way to know who is listening, what is getting through, and what is unclear in real time, which causes a lot of confusion and frustration. There should be a policy change that requires students to attend the class by opening their cameras. To compensate for the lack of feedback from the students, satisfaction surveys were done almost daily and reported issues were addressed in real time. Overall, those forms indicated high satisfaction, although some students “reserved” their issues to the final feedback form, where it was too late to address. A final concern is that the students tend to complain to other people than the teacher, which complicates the communication, handicaps real-time solutions, and overall hurts the students.

Comments from the teachers team

The teachers on the course considered the course to be intense and the students are learning a lot. They appreciated the changes that were made to address problems with last year while giving positive feedback on how to improve student performances. The success of this course is reflected in the number of students that

passed the examination with distinction (3/23 U, 8/23 G, and 12/23 VG).

Evaluation and changes made since the previous course

The course has been redesigned from last year, with the following changes:

1. The materials were re-organized. New literature was provided to help students without background in programming.
2. 3 homework assignments were removed.
3. 6 quizzes were added.
4. 3 class exercises (1 in person, 2 in groups) were added (partially replacing the HW). Here, the students practiced advanced subjects that were not included in previous years. Personal feedback to those projects was provided at the end of each project, which did not exist before.
5. The exam was harder, but choice between the questions was offered, which did not exist before.
6. A preparation day was added before the exam.
7. The students were asked to attend 3 departmental lectures (1 hour each), relevant to their studies.
8. A former student was invited to speak with the student about the use of python in his work in the industry.
9. Satisfaction and feedback forms were collected almost daily (overall 8).

Suggested changes for the next course

1. Quizzes would be mandatory, but pass/fail and flexible deadline to reduce anxiety.
2. The limited time of BINP16 is also used to teach how to use github, an external tool where the students can place their projects. These 2 hours should be moved to a different course.
3. Define more clearly which sessions are mandatory and which are elective.

4. Load of afternoon practices before the running exercises would be reduced to allow the students get a head start with the running exercise.
5. Reduce the load of the running exercises.
6. Consider moving the exam to the end of the course.
7. Students should be required to open their cameras (policy change).
8. Students should be made aware that all issues with the course have to be resolved first with the teacher, than Dag, and eventually Jep, not the other way around.

Other teachers involved in the course

Ninoslav Pandiloski, Aaron Scott Antton, Lamarca Bella Sinclair, Deborah Figueiredo Nacer de Oliveira, Jakob Willforss Joel Wallenius Katherine Kelly Malou Arvidsson Monika, Kurgonaité, Nikos Tsardakas Renhuldt, Suze Julia Roostee