# Template for course descriptions (BA elective courses) at the Department of Sociology

To be completed by the lecturer and sent to [soc-studieadm@soc.ku.dk](mailto:soc-studieadm@soc.ku.dk) and [jd@soc.ku.dk](mailto:jd@soc.ku.dk).See the bottom of the document for further guidance on each point.

Contents:

Course description **(must be completed)**

Instructions for course description

Workload **(must be completed)**

# Course description:

|  |  |
| --- | --- |
| **1. Contact information:**  *Name, email address, phone numbers etc.* | Merlin Schaeffer, mesc@soc.ku.dk |
| **2. Course title**  *All BA electives are to be offered in English. If the title is English, no Danish title is required.* | Advanced Quantitative Methods |
| **3. Semester(s)**  *Autumn 2022 = E22*  *Spring 2023 = F23*  *Summer 2023 = S23* | *X Autumn 2022 = E22*  *Spring 2023 = F23*  *Summer 2023 = S23* |
| **5. Number of ECTS credits**  *- 7.5 ECTS (BSc2016)*  *- 15 ECTS (BSc2016)* | *X 7,5 ECTS*  *15 ECTS* |
| **8. Preferred exam type**  *Exam type and options depend on level and course category.   For Active Participation please describe what Active Participation will consist of!* | Written exam |
| **9. Teaching schedule**  *Specify the number of lessons and weeks. Standard schedule:*   * *7.5: 14x3 or 7x2/7x4* * *15: 14x3x2*   *Summer Schools in Summer 2023 will be possible in week: 31, 32, 33 and/or 34* | *X 14x3*  *7x2 / 7x4*  *14x3x2*  *Summer School (no less than 2 weeks):* |
| **10. Course content**  *Description of the course content (and objective), i.e. a description of what happens during the actual course. For example a description of the methods and theories which will be introduced, touched upon or worked with and the topics which students will be working on during the course.* | The course introduces students to advanced regression analysis and its application in sociological research with a special focus on causal analysis. The student acquires knowledge of  · Multiple linear regression,  · Interaction effects,  · Selection of control variables for regression models,  · OLS Assumptions,  · Regression analysis of experimental studies,  · Regression analysis of natural experiments using instrument variables and regression discontinuity designs.  The student must be able to explain these topics. The student must be able to further explain the logic behind the use of regression analysis for the estimation of causal effects. Finally, the student must be able to reflect on the possibilities and limitations of the use of regression analysis in sociological research. |
| **11. Intended learning outcome**  **Important – new requirements for description of objectives**  The description of objectives consists of the learning outcome at the end of the course. Learning outcomes are defined in the Programme Order in terms of knowledge, skills and competences.  Consequently, the description of objectives/learning outcomes must be subdivided into:   * knowledge, * skills and * competences.   The attached instructions (from HEALTH) serve as a source of guidance and inspiration on how to formulate the description of objectives, including the use of appropriate terms and active verbs.  *The level for the description of objectives must be aligned with the level (BA/MA) at which the course is primarily targeted.* | KNOWLEDGE:  The course introduces the student to regression analysis and its application in sociological research. The student acquires knowledge of  - Multiple linear regression,  - Interaction effects,  - Statistical tests and their use in regression analysis,  - OLS assumptions behind regression analysis,  - Selection of control variables,  - Regression analysis of experimental studies,  - Regression analysis of natural experiments using  SKILLS:  The course gives the student the opportunity for practical mastery of regression analysis in R. Students will be able to:  - Perform multiple regression analysis,  - Interpret regression coefficients,  - Use statistical tests to test hypotheses,  - Select relevant control variables,  - Specify interaction effects,  - Apply instrument variable regression,  - Apply regression discontinuity designs,  - Perform model checks,  - Present and communicate results based on regression analysis in relation to a given problem,  - Critically evaluate its empirical results.    KOMPETENCE:  After completing the teaching, the student must be able to:  - Acquire further advanced quantitative methods such as factor analysis, multilevel models or panel data analysis.  - Translate his knowledge and skills into advanced quantitative analyses for research and consulting.  - Be able to plan and carry out reports or reports involving regression analysis. |
| **12. Teaching and learning methods**  *The types of instruction are described here, e.g. lectures, class instruction, exercises and excursions.* | Lecture, tutorial, and regular statistics tasks using R. |
| **13. Feedback** *A description of how peer-feedback is an integrated part of the lectures* | We will make use of tutorials and regular Peer feedback. |
| **14. Literature**  *In this field, indicate which teaching materials will be used, primarily by listing the main literature. The teacher uploads the full curriculum to Absalon. See also the workload table below.* | De Veaux, Richard, Paul F. Velleman, and David E. Bock. 2016. Stats. Data and Models. Boston: Pearson & Addison Wesley.  Angrist, Joshua D., and Jörn-Steffen Pischke. 2014. Mastering ’Metrics: The Path from Cause to Effect. Princeton University Press. |
| **15. Recommended academic qualifications**  *The specific competences which students must possess (or which it would be advantageous for students to possess) in order to be able to participate in the course may be indicated here.* | Students must have mastered “Basic Statistics”. |
| **16. IT requirements, if any**  *Is there a need for IT rooms? (As standard, all rooms are equipped with network connection and projector)* | Own laptop with running and updated versions of RStudio and R. |
| **17. Comments, if any**  *Here you can provide particular information in relation to the course.* |  |

**Course description guidelines**

**Re 2.**

The title will be stated on the graduate's certificate. If the course is offered in Danish, we need an English title for the English version of the certificate. If the course is offered in English, only the English title is used.   
**Please Note!** The course cannot change the title, if it has been offered before.

**Re 3.**

You must write in which semester(s) your course will be offered. If, for example, you want to offer your course in both E22 and F23, you do not need to submit your form twice; you should just remember to add the information in the form.

**Re 5.**

Only one exam type must be selected.

Oral exam:

* Synopsis exam. Individually or in groups. 7-point grading scale. Internal grading.

Written exam:

* Written assignment answering one or more questions posed by the lecturer. 48 hours to 3 weeks. Individually or in groups. 7-point grading scale. Internal grading.
* Term paper. Individually or in groups. 7-point grading scale. Internal grading.
* Portfolio assignment. May be handed in on an ongoing basis for feedback. Handed in collectively at the end of the course. Individually or in small groups. 7-point grading scale. Internal grading.
* Active Participation. Pass/fail.  
  You need to describe what Active Participation will consist of in your course.

**Re 6.**

The course must be organised as described below. A schedule other than the one described must be approved by the head of studies.

A standard 7.5 ECTS course is taught over 14 weeks of one weekly 3-hour session, or 7 weeks of two weekly 2-hour sessions + 7 weeks of four weekly 2-hour sessions.

A standard 15 ECTS course is taught over 14 weeks of two weekly 3-hour sessions.

**Re 7.**

Write down what students can expect to learn on the course (e.g. which subjects, methods, theories). This item is particularly important in relation to students' choice of course. The course registration is binding, so students will not be able to deregister and are obliged to pass the course chosen. It must therefore be possible for the students to make decisions which are as informed as possible, and the description under this item must therefore provide the students with a good and realistic impression of the overall course content. An actual course plan is not expected.

**Re 8.**

The description of objectives consists of the learning outcome at the end of the course. Learning outcomes are defined in the Programme Order in terms of knowledge, skills and competences.

The description of objectives for the course should be formulated in such a manner that it clearly specifies the knowledge, skills and competences on which it is based.

*The level for the description of objectives must be aligned with the level (BSc/MSc) at which the course is primarily targeted.*

This point is particularly important in relation to the student’s choice of course. Course registration is binding. Students are therefore not allowed to withdraw and are required to pass the chosen course. As such, they must be able to make the most informed decision possible. The description in this section must therefore give the student a good and realistic impression of the course.

**Re 9.**

If this box is not completed, 'class instruction' will be specified as default.

**Re 10.**Write down, how you plan the peer-feedback to be an integrated part of the lectures of the course

**Re 11.**

The specific syllabus and literature need not be stated here, but must be specified in Absalon. See also the workload form below.

|  |
| --- |
| Link to curricula: <http://sociologi.ku.dk/english/curricula/> |

# Workload

It is expected that a student generally uses 27.5 working hours per 1 ECTS:

|  |  |  |
| --- | --- | --- |
| **ECTS** | **Total number of lessons** | **Total number of student working hours** |
| 7.5 | 42 | 206 |
| 15 | 84 | 412 |

In the table below, you must indicate what you consider the students' average workload to be on the course. If the course is offered as, for example, a 7.5 and 10 ECTS course, the workload must be indicated for both ECTS levels.

The workload form must be used to give students a better idea of the course in question. The workload form is also a tool for documenting different workloads on courses with two different ECTS values. Finally, the form must be used to determine the scope of the syllabus.

|  |  |  |
| --- | --- | --- |
| **Workload\*** | | |
| **Categories** | **Explanation** | **Number of hours** |
| Total teaching hours | The total number of teaching hours is fixed and corresponds with the ECTS credits (e.g. 7,5 credits = 42 hours, see table above) | 7.5 ECTS credits |
|  |
| Reading the syllabus | No. of student working hours spent reading the literature on the syllabus The norm is 8–12 pages per hour. The precise extent is determined following an assessment of the curriculum’s level of difficulty. | 7.5 ECTS credits |
|  |
| Other preparations for classes | No. of student working hours earmarked for other study-related activities (acting as opponent on assignments, student presentations, etc.) | 7.5 ECTS credits |
|  |
| Written papers | No. of student working hours on ongoing assignments | 7.5 ECTS credits |
|  |
| Exam preparation and exams | No. of student working hours preparing for and sitting exams | 7.5 ECTS credits |
|  |
| Total student working hours | The total number of teaching hours is fixed and corresponds with the ECTS credits (e.g. 10 credits = 275 hours, see the table above) | 7.5 ECTS credits |
|  |

**PLEASE NOTE!**  
If your course is for 15 ECTS credits, please just enter the ECTS field before you insert the number of hours in the table above.