

Humboldt University Berlin

Institute of Marketing

Prof. Dr. Daniel Guhl
Seminar Marketing (70701)
Syllabus Winter Term 2025/26

Course Description and Objectives:

This course focuses on *choice-based conjoint (CBC) analysis* as a tool for *estimating individual-level preference parameters*. Students learn the *economic and statistical assumptions* that underpin CBC, their *managerial implications*, and *best practices* for *designing choice experiments* and *collecting data*. Working in *teams*, students *develop a research question, design a CBC study, and collect data*. Using *Bayesian estimation* in R, specifically the `bayesm` package, they then estimate *individual part-worth utilities* and use them for *segmentation, targeting, and "what-if" market simulations*. By the end of the course, participants will be able to design a CBC study from scratch, estimate the model, interpret the results, and translate the findings into actionable recommendations.

Prerequisite for Participation:

Prerequisite for participation: Successful participation in the course *Advanced Marketing Modeling* or *Causal Inference in Marketing*. Students need to know how to code in R.

Registration:

Max. number of participants: 20. Students with a case of hardship according to §90 (1) ZSP HU (health, social, disability, or family reasons) will be given preference in the selection process (proof must be submitted during the registration period). Otherwise, the decision will be made by lot. Registration for the seminar will take place from October 1 to October 10, 2025. Please email all the necessary information, including your actual transcript of study success, to mktg@wiwi.hu-berlin.de. It is sufficient to provide a printout of your study success via Agnes. No official stamp is needed.

Course Web Page:

The course material and additional information will be made available via the *moodle system* of HU Berlin. You will receive the course key in the first lecture.

Course Grading:

Each student can join a *group*, of *up to 2 students* or work *alone*. A group therefore exist of one or two students. Your grade will base on a *written documentation of up to 15 pages plus appendix* about the empirical application of the CBC model. We develop several questionnaires in the seminar and each student *must collect survey data from at least 50 respondents*. The *appendix must include the entire R code* and a *csv* file of your *collected data*. It is requested that you *present the results* of your empirical study to all seminar participants on the dates outlined below and discuss your estimation results.

All students must attend the digital Moodle course *709002 Introduction to scientific work (BA/MA)* prior to writing the seminar paper. Written reports must be sent until January 21, 2026 (EoD) as pdf document to daniel.guhl@hu-berlin.de.

Material and Relevant Literature:

- Eggers, F., Sattler, H., Teichert, T., & Völckner, F. (2022). Choice-Based Conjoint Analysis. In C. Homburg, M. Klarmann, & A. Vomberg (Eds.), Handbook of Market Research (pp. 781-819).
- Elshiewy, O., Guhl, D., & Boztug, Y. (2017), Multinomial Logit Models in Marketing – From Fundamentals to State-of-the Art, Marketing ZFP, Vol. 39 (3), 32-49.
- Rossi, P., Allenby, G., & Misra, S. (2024), Bayesian Statistics and Marketing, Wiley.

Software:

In this lecture, R (<https://www.r-project.org>), a free programming language for statistical computing and statistical graphics, is used.

Tentative Time Schedule:

Thursday, 12:15 - 13:45, SPA 1, Room 21B

Each student must attend all sessions!

Week	Date	Content
41	Oct 10	Deadline for email application to the seminar
42	Oct 13	Notification of students about participation
42	Oct 16	Course logistics and introduction to the course
43-47	Oct 23 - Nov 20	Introduction to scientific work, Recap on R, Recap on discrete choice models, CBC, design of questionnaire
48-50	Nov 27 - Dec 11	Collecting CBC data
49-51	Dec 3 - Dec 17	Estimating preference parameters of CBC model with bayesm package, discussion estimation approach
2-3	Jan 8 - Jan 15	Discussion and work on assignment
4	Jan 21	Deadline for submitting the course work by email
4-7	Jan 22 - Feb 12	Presentations of estimation results and discussion