Name of the subject: Advanced quantitative methods in tourism and hospitality Teacher(s): Ivana Blešić, Tamara Jovanović, Sanja Kovačić

Status of the subject: Elective

Number of ECTS points: 15

### **Condition:**

### Goal of the subject

The aim of the course is to enable students to use advanced quantitative methods of data analysis in research in the field of tourism and hospitality. Students will upgrade their knowledge of using the necessary tools to successfully engage in research work.

### Outcome of the subject

The student will be able to:

- understand advanced quantitative methodology in scientific papers
- conclude when and how certain advanced quantitative methods should be applied in their research
- apply and interpret complex quantitative analyzes

• draws conclusions based on the obtained results in a professional manner

# Content of the subject

### Theoretical lectures

- Regression analysis: simple linear regression, multiple regression, nonlinear regression, selection of appropriate model;
- Factor analysis;
- Cluster analysis;
- Moderator and mediator analysis
- GLM (general linear modeling)
- Confirmatory factor analysis
- SEM (Structural equation modelling)

# Practical lectures

Application of all the above stated quantitative methods in data processing in the software Statistical Package for Social Sciences (SPSS) and AMOS.

#### **Recommended literature**

Baggio, R. (2011). Quantitative methods in tourism, Bristol: Chanel view publications.

Cramer D. (2003). Advanced Quantitative Data Analysis (Understanding Social Research) 1st Edition. Open University Press.

Byrne, B. M. (2010). Structural equation modeling with AMOS: basic concepts, applications, and programming (multivariate applications series). Psychology press.

Pallant, J. (2017). SPSS. Mikro knjiga, Beograd.

Kovačić, S., Jovanović, T., & Dinić, B. M. (2020). Development and validation of a new measure of travel destination personality. Psihologija, 53(1), 65-85.

Božić S., Jovanović T., Tomić N., Vasiljević Đ.A. (2017). An analytical scale for domestic tourism motivation and constraints at multi-attraction destinations: The case study of Serbia's Lower and Middle Danube region. Tourism management perspectives, 23, 97-111.

Number of active classesTheory: 4 (60)Practice: 4 (60)

# Methods of delivering lectures

The application of advanced quantitative methods is presented through a demonstration of data processing on example of research datasets from tourism and hospitality, with the active participation of students. The frontal way of presenting the theoretical foundations of quantitative analysis follows the work of students in groups and in the statistical package SPSS and AMOS.

# Evaluation of knowledge (maximum number of points 100)

Written exam: 50, Oral exam 50