

## Syllabus Course description

Course title	Research Methods and experimental design
Course code	31002
Scientific sector	SECS-S/01
Degree	Master in Tourism Management
Semester and academic year	1st Semester 2022/2023
Year	1st study year
Credits	6
Modular	No

Total lecturing hours	36
Total lab hours	-
Total exercise hours	-
Attendance	suggested, but not required
Prerequisites	not foreseen
Course page	https://www.unibz.it/en/faculties/economics- management/master-tourism-management/course- offering

Specific educational objectives	The course is designed for acquiring professional skills and knowledge in the area of empirical research methods and statistics.
	Educational objectives: The students will be enabled to critical assessment and independent treatment of empirical research issues, including planning, data collection and statistical data analysis.

Lecturer	Prof. Hermann Atz, <u>Hermann.Atz@unibz.it</u> , Campus Bruneck-Brunico, 1 <sup>st</sup> Floor, Office 1.09 <u>https://www.unibz.it/en/faculties/economics-</u> <u>management/academic-staff/person/10142-hermann-atz</u>
Scientific sector of the lecturer	SECS-S/01
Teaching language	English
Office hours	https://www.unibz.it/en/timetable/?department=26&degr ee=13009%2C13134
List of topics covered	<ul> <li>The Scientific Method</li> <li>Overview on qualitative and quantitative social research methods</li> <li>Data collection: survey, experimentation, observation</li> <li>Measurement and questionnaire design</li> </ul>



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	<ul> <li>Data types, data visualization and exploratory data analysis</li> <li>Association and correlation</li> <li>Basic concepts of probability</li> <li>Parameter estimation and statistical hypothesis testing</li> <li>Linear regression model and inferential aspects</li> <li>Analysis of variance (ANOVA)</li> <li>Statistical programming with R software</li> </ul>
Teaching format	Frontal lectures; Practical lectures: individually and in groups
Learning outcomes	Knowledge of the most relevant social research methods and understanding their field of application; knowledge of the most important statistical methods for data analysis; understanding their rationale, conditions of usage and their results.
	Applying knowledge and understanding: Designing a study, selection of appropriate method of data collection; identification of appropriate statistical method for data analysis.
	Making judgments: Critical reviewing of own scientific work and of original publications; interpretation of statistical analyses in the context of diverse research fields. Ability to judge the appropriateness of statistical methods.
	Communication skills: Ability to describe and explain research design; ability to present results of statistical analyses correctly

AssessmentGrading is based on a written final exam consisting of<br/>questions on theoretical concepts as well as statistical<br/>exercises, with a duration of 90 minutes.Attending studentsAttending students in addition may present a written<br/>report on practical exercises done in groups which makes<br/>up for 20 % of the final grade, with the written final exam<br/>making up for the remaining 80%. For students not

Ability to independently deepen their knowledge in the field of data collection, construction of measurement

and intelligibly.

Learning skills:



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	presenting such report and for <b>non attending students</b> the final exam will be worth 100% of the final grade. For a positive overall grade (18 points or more of a maximum of 30 points) the final written exam has to be positive in any case.
Assessment language	English
Evaluation criteria and criteria for awarding marks	<ul> <li>Assessment of final examination and group work is based on the following criteria: <ul> <li>correctness and completeness of answers</li> <li>ability to identify and apply appropriate statistical methods</li> <li>use of technical terminology</li> <li>clarity of explanations and comments</li> <li>For tasks requiring calculations it is important to point out the computational path leading to the final result.</li> </ul> </li> </ul>

Required readings	Lecture script
Supplementary readings	Babbie, Earl R. (2016), The Basics of Social Research, 7th
	edition, Boston, MA: Cengage Learning.
	Moore, David S. (1991), Statistics: concepts and
	controversies, 3 <sup>rd</sup> ed., New York: W.H. Freeman and
	Company.
	Spiegelhalter, D. (2019), The Art of Statistics: How to
	Learn from Data, New York, NY: Basic Book.