Module Title	**Research Methods**
Level	5
Reference No. *(showing level)*	ASC_5_437
Credit Value	20 CATS points
Student Study Hours	• **48 contact hours** consisting of lectures, workshops and seminars. • **152 student-managed learning hours** consisting of blended learning via materials uploaded to VLE; computer-based classes for practicing statistics for data analyses and tutorials; self-directed learning via searches of scientific data bases; time allocated for proposal development.
Pre-requisite learning	Scientific Skills – ASC_4_402
Co-requisites	Module for mini-project for Sport and Exercise Science (SES_836) and Sports Coaching and Analysis (SCA_4162) courses.
Excluded combinations	N/A
Module coordinator	Katya Mileva
School/Division	Applied Sciences/Human Sciences
Short Description	This module is intended to develop students' understanding of the research process in the area of applied human sciences. It will provide knowledge about main research principles and methodologies for data collection and analysis. The students will gain practical experience in developing a research proposal and analysing data with parametric and non-parametric statistical methods using both MS Excel and IBM Statistical Package for the Social Sciences (SPSS).
Aims	This module aims to develop knowledge and enable students to acquire, develop and practice research skills required to propose, defend and undertake an independent research project relevant to applied human sciences and following the guidelines for best practice for research.
Learning Outcomes	By completing this module the students will: 1. Display knowledge and understanding of the research methods, principles and design of projects or relevance to contemporary theory and practice in disciplines of relevance to sport and Exercise Science and coaching practice. 2. Demonstrate intellectual ability in critical appraisal of the research literature and in effective synthesis of information to produce a coherent research proposal.

	3. Develop essential skills needed to identify a clear research question, formulate valid research hypotheses and design relevant research methodology as well as select and apply appropriate statistical methods for data analyses. 4. Design and defend their research proposals as well as conduct risk assessment and ethical evaluation of the proposed research methodologies.
Employability skills	This module will equip students with general competences and practical skills required for planning research activities, designing effective proposals and analysing qualitative and quantitative data in the field of their specialism. It will enable students to define a relevant research concept and undertake appropriate methods for data collection and analysis. Students will develop proficiency in using electronic and traditional search tools and applying effective techniques to identify useful information. These skills are required for improving employability for professional careers (e.g. project managers, analysts, technicians, consultants, therapists) as well for undertaking postgraduate programs in the field of applied human sciences.
Teaching and learning pattern	In weekly sessions the students will be introduced to the foundations of the research process, the contemporary ethical, legal and political issues in scientific research. The principles for planning, managing and evaluation of research projects will be reinforced during seminars and workshops. The quantitative, qualitative and mixed modes of investigation and statistical data analyses will be introduced via on-line materials uploaded on VLE and practiced during supervised computer-lab based classes. The students will learn to design effective literature search, write-up and present research projects by self-managed learning, personal and group tutorials and presentations during the workshops.
Indicative content	• Methods for mixed, qualitative and quantitative research. • Research responsibilities: ethical, legal, and safety requirements. • An overview of statistics. • Project design. • Describing and discussing data. • Practice of statistics.
Assessment *Elements & weightings*	100% coursework with 2 sub-components: 1. A Statistics in class test (40%) 2. Ethics form and defence of research proposal (60%)
Attendance	Minimum attendance is 80% of all sessions
Indicative Sources *(Reading lists)*	**CORE TEXTS** 1. Blaxter, L., Hughes, C. and Tight, M. *How to research*. 4th ed. Maidenhead: Open University Press/McGraw-Hill Education: 2001. E- book http://www.mheducation.co.uk/openup/chapters/0335209033.pdf)

	2. Field, A. *Discovering Statistics using IBM SPSS Statistics.* 4th ed. London, England: SAGE Publications Ltd.: 2013 3. Olivier, P. *The Student's Guide to Research Ethics.* Open University Press: 2003. 4. O'Donoghue, P. *Statistics for Sport and Exercise Studies: An Introduction.* Routledge: 2012. 5. McQuenn, R. and Knussen, Ch. *Introduction to Research Methods and Statistics in Psychology: A Practical Guide for the Undergraduate Researcher*. 2nd ed. Pearson Education Ltd: 2013. 6. McNamee, M.J., Olivier, S., Wainwright, P. *Research Ethics in Exercise, Health and Sport Sciences (Ethics and Sport).* Routledge: 2006. ***ADDITIONAL TEXTS:*** 1. Olivier, P. *Succeeding with your literature review: a handbook for students*. Open University Press/McGraw-Hill Education: 2012. 2. Martin, W.E., and Bridgmon, K.D. *Quantitative and Statistical Research Methods: from Hypothesis to Results*. San Francisco, CA: Jossey-Bass: 2012. 3. Lapan, S.D., Quartaroli, M.T., and Riemer, F.J. *Qualitative Research: An Introduction to Methods and Designs.* San Francisco, CA: Jossey-Bass: 2012. 4. Wallwork, A. *English for writing research papers*. New York. Springer: 2011.