Module Description:

Master of Science: Sport Science – Movement and Wellbeing

Module 1: Methodological and Epistemological Foundations					
Kennnummer		Workload	Leistungs-punkte (LP)	Studiensemes-ter	Dauer
1		300 h	10 LP	1st Semester	1 Semester
	Veranstaltungen		Kontaktzeit	Selbststudium	Leistungspunkte
	a) Lecture and Exercise: Multi-variate Statistics and Data Analysis (obligatory)		3 SWS/31,5 h	88,5 h	4 LP
	b) Lecture: Gaining Knowledge in Science (obligatory)		1 SWS/10,5 h	49,5 h	2 LP
	c) Lecture and Exercise: Combined Qualitative and Quantitative Methods (obligatory)		1 SWS/10,5 h	49,5 h	2 LP
	d) Lecture and Exercise: Test Theory and Questionnaire Design (obligatory)		1 SWS/10,5 h	49,5 h	2 LP
2.	Lehrformen Lecture and Exercise				
3.	Gruppengröße See curricular standards from the 1st of July, 2013				
4.	Lernziele: Acquisition of Comprehensive Skills: ▪ formulation of research-driven questions, their corresponding analyses and critical reflection of the results ▪ critical reflection and independent application of further statistical concepts as well as methods for evaluating research data (especially multi-variate processes) Acquisition of broad theory-based knowledge of: ▪ theories of knowledge acquisition. ▪ the significance of style and culture in science. ▪ the possibilities and limits of qualitative methods. ▪ the combination of qualitative and quantitative methods. ▪ the entire spectrum of differing approaches to qualitative methods—from “Grounded Theory” to ethnomedology. ▪ the development of questionnaires, including the production of scales. ▪ test theory. ▪ the possibilities and limits of quantitative methods. ▪ specific qualitative and quantitative methods from various branches of sports science such as training science, kinesiology, sport psychology, sports medicine and sports economics. Schlüsselqualifikationen: ▪ Capacity to reflect on scientific findings ▪ Comprehensive and secure scientific methods in the fields of natural science, social science, and the humanities ▪ Further knowledge and skills pertaining to both qualitative and quantitative methods ▪ Sound knowledge of techniques used in scientific works ▪ The comprehensive development of the skills used for the planning of empirical studies such as the analysis and interpretation of research findings ▪ Comprehensive and systematic knowledge as a prerequisite for the independent application and transfer of specialized, empirical research and analysis methods to application-oriented and/or base-oriented questions (e.g. as part of a final thesis in the Master and/or doctorate)				

5.	Inhalte: ▪ In-depth work with statistical software packages for qualitative and quantitative analyses ▪ Graphical data analysis ▪ Generalized linear models ▪ Multivariate analysis of variance ▪ Explorative and confirmatory factor analysis including scale development ▪ Structural equation models ▪ Cluster analyses ▪ Multiple linear scaling ▪ Questionnaire design ▪ Test theory ▪ Sound handling of significance, effect strength, conditional and absolute probabilities ▪ History of science (falsificationism, paradigm shift, refusal to use methods) (Popper, Kuhn, Feyerabend) ▪ Specific approaches to quantitative research ▪ Quantitative evaluation research, especially satisfaction measurements ▪ Special qualitative research methods beyond the interview (e.g. participating and non-participating observation, document analysis, qualitative experiment)
6.	Verwendbarkeit des Moduls Master of Science Sportwissenschaft
7.	Teilnahmevoraussetzungen None
8.	Prüfungsformen 8.1 Studienleistungen None 8.2 Modulprüfung Exam from a), b), c) and d) (60 Min)
9.	Voraussetzungen für die Vergabe von Leistungspunkten Regular and active participation as well as the successful completion of examinations.
10.	Stellenwert der Note in der Endnote According to the performance points of the module: 10/96
11.	Häufigkeit des Angebots Yearly
12.	Modulbeauftragter und hauptamtlich Lehrende Module representative: Prof. Doppelmayr Full-time faculty: Faculty of the Institute of Sports Science

13. Sonstige Informationen:

Recommended Literature:

Bachkhaus, K., Erichson, B. & Blinke, W. (2015) *Multivariate Analysemethoden: Eine anwendungsorientierte Einführung*. Springer Verlag

Bachkhaus, K., Erichson, B. & Weiber, R. (2015) *Fortgeschrittene Multivariate Analysemethoden: Eine anwendungsorientierte Einführung* Springer Verlag

Bhaskar, R. (2013). *A realist theory of science*. London: Routledge.

Bortz, J. & Lienert, G.A.(2008) *Kurzgefasste Statistik für die klinische Forschung. Leitfaden für verteilungsfreie Analyse kleiner Stichproben.* Heidelberg, Springer.

Eberhard, K. (1999). *Einführung in die Erkenntnis-und Wissenschaftstheorie. Geschichte und Praxis der konkurrierenden Erkenntniswege*, Weinheim: Kohlhammer.

Erdfelder, E., Mausfeld, R., Meiser, T. & Rudinger, G. (Hrsg.) (1996). *Handbuch Quantitative Methoden*. Weinheim: BELTZ PsychologieVerlagsUnion

Feyerabend, P. (1976) *Wider den Methodenzwang*. Suhrkamp (stw 597), Frankfurt am Main: Suhrkamp (*Against Method*. Fourth Edition. Vers. London)

Field, A. (2013) *Discovering statistics using IBM SPSS statistiks* Los Angeles, London: Sage.

Flick, U. (2007). Qualitative Sozialforschung. Eine Einführung. Reinbek bei Hamburg: Rowohlt.

Flick, U., Kardorf, E. von (2005). *Qualitative Forschung: Ein Handbuch*. Reinbek bei Hamburg: Rowohlt.

Groß, J. (2010*). Grundlegende Statistik mit R: Eine anwendungsorientierte Einführung in die Verwendung der Statistik Software R.* Wiesbaden: Vieweg+Teubner.

Handl, A. (2002). *Multivariate Analysemethoden. Theorie und Praxis multivariater Verfahren unter besonderer Berücksichtigung von S-PLUS.* Berlin: Springer.

Imbens, G.W. Rubin,D.B. (2015) Causal Inference for Statistics, Social, and Biomedical Sciences: An Introduction 1st Edition. Cambridge: University Press.

Jäckle, S. (Hrsg.) (2017). *Neue Trends in den Sozialwissenschaften. Innovative Techniken für qualitative und quantitative Forschung.* Wiesbaden: Springer.

Kuhn, Th. (1962) *The Structure of Scientific Revolutions*. Chicago: University of Chicago Press.

Lamnek, S. (2005). *Qualitative Sozialforschung*, 4. Auflage. Weinheim: BELTZ.

Popper,K. (1934) *Logik der Forschung*. (engl.: The logic of scientific discovery). De Gruyter. https://monoskop.org/images/e/ec/Popper_Karl_Logik_der_Forschung.pdf

Raithel, J. (2004). *Quantitative Forschung*. Wiesbaden: Springer.

Rudolf, M. & Müller, J. (2012) *Multivariate Verfahren. Eine praxisorientierte Einführung mit Anwendungsbeispielen in SPSS.* Göttingen, Bern … Hogrefe.

Sedlmeier, P. & Renkewitz, F. (2013) *Forschungsmethoden und Statistik. Ein Lehrbuch für Psychologen und Sozialwissenschaftle*r. München, Harlow … Pearson Verlag.

Stegmüller,W. (1983) *Probleme und Resultate der Wissenschaftstheorie und Analytischen Philosophie - Erklärung-Begründung-Kausalität* Band I, Berlin: Springer

Weiber, R. & Mühlhaus, D. (2013) *Strukturgleichungsmodellierung: Eine anwendungsorientierte Einführung in die Kausalanalyse mit Hilfe von AMOS, SmartPLS und SPSS*. Wiesbaden: Springer Gabler

Module 2A: Movement and Wellbeing Individually and Socially

Kennnummer:	work load	Leistungs-punkte	Studiensemes-ter	Dauer
2a	240 h	8 LP	1st Semester	1 Semester

	Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
	a) Lecture: Health Systems, Public Health and Health Policy (obligatory)	1 SWS/10,5 h	49,5 h	2 LP
	b) Lecture: Workplace Health Management and Health Promotion (obligatory)	2 SWS/21,0 h	39,0 h	2 LP
	c) Lecture: Health Psychology (obligatory)	1 SWS/10,5 h	49,5 h	2 LP
	d) Lecture: Nutritional Physiology (obligatory)	1 SWS/10,5 h	49,5 h	2 LP

2. Lehrformen

Lecture

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- The ability to interpret epidemiological data
- In-depth knowledge, application and critical assessment of health-specific conditions and their anchoring in the health system
- Interdisciplinary in-depth knowledge, application and critical assessment of a variety of approaches to occupational health management
- In-depth knowledge, application and critical reflection of health-relevant models
- Knowledge of health psychologically relevant basics such as stress, social support, substance abuse and health psychological prevention
- Ability to assess the possibilities and limitations of a data-oriented interpretation
- Identifying the boundary conditions of models
- In-depth knowledge, application and critical assessment of nutritional-physiological aspects
- Acquisition of a broad and theoretically founded as well as deepened knowledge of: nutritional ingredients, metabolic processes and nutrition-dependent diseases

Schlüsselqualifikationen:

- Comprehensive, specialized and systematic knowledge of the latest state of knowledge on health epidemiological and health psychological development
- Comprehensive and systematic knowledge as a prerequisite for independent application and transfer into the setting of "occupational health management"
- Enhancement of English language skills
- Comprehensive, specialized and systematic knowledge on the latest state of knowledge about nutritional-physiological basics
- Knowledge in the areas of nutrition in elderly (nutritional physiology, nutritional forms, nutritional status, over- and malnutrition, sports activities and various diseases)

5.	Inhalte: ▪ Introduction to the health system ▪ Participating bodies/associations/ companies in the health system ▪ Health development of society ▪ Health models ▪ Theories on health behaviour ▪ Stress and health ▪ Health-psychological prevention ▪ Age and health ▪ Legal framework conditions for prevention and rehabilitation ▪ Design of health-promoting framework conditions ▪ Elements of company health management (occupational safety, health protection, company medical service, reintegration, company health promotion, personnel development) ▪ Behaviour and ratio prevention as well as stress vs. strain in relation to the body and psyche ▪ Evaluation and quality assurance in occupational health management ▪ General interdisciplinary health aspects ▪ Differences between collection and utilisation ▪ Food, vegetable and animal nutrients, vital substances, micronutrients, foreign/contaminants; dietary fibres, secondary plant substances, water, minerals, bioactive substances ▪ Food quality ▪ Energy balance; organ dependency, basal metabolic rate; performance increase, BMI, BMR, TEE, PAL,...) ▪ Metabolism: e.g. maintenance metabolism, fat metabolism, carbohydrate metabolism, protein metabolism (bio-logical value,...) ▪ Age, gender and sport specifics ▪ Metabolic diseases, malnutrition, hypervitaminosis (obesity, diabetes II,...) - nutritional diseases ▪ Dietetics ▪ Digestion (microflora of the digestive tract, ...) ▪ General principles of biological regulation (e.g. cell metabolism, membrane function, hormonal regulation and enzyme activity as well as specific metabolic situations, e.g. hunger, thirst, stress, cold, heat, ...)
6.	Verwendbarkeit des Moduls Master of Science Sportwissenschaft
7.	Teilnahmevoraussetzungen None
8.	Prüfungsformen 8.1 Studienleistungen 8.2 Modulprüfung Exam from a), b) c) and d) (60 Min)
9.	Voraussetzungen für die Vergabe von Leistungspunkten Successful completion of the examination
10.	Stellenwert der Note in der Endnote According to the performance points of the module: 8/96
11.	Häufigkeit des Angebots Yearly
12.	Modulbeauftragter und hauptamtlich Lehrende Module representative: Univ.-Prof. Dr. W. Schöllhorn Full-time faculty: Faculty of the Institute of Sports Science

13.	Sonstige Informationen **Recommended Literature:** Badura, B. (2017). *Arbeit und Gesundheit im 21. Jahrhundert: Mitarbeiterbindung durch Kulturentwicklung*. Heidelberg: Springer, Gabler Badura, B., Walter, U., Hehlmann, T. (2010). *Betriebliche Gesundheitspolitik: Der Weg zur gesunden Organisation*. Berlin, Heidelberg: Springer Badura, B., Ritter, W. Scherf, M., (1999). *Betriebliches Gesundheitsmanagement - ein Leitfaden für die Praxis*, (Forschung aus der Hans-Böckler-Stiftung). Berlin: edition Sigma Brinkmann, R. (2014). *Angewandte Gesundheitspsychologie*, Pearson Verlag, Deutschland Hajen, L., Paetow, H., Schuhmacher, H. (2013). *Gesundheitsökonomie: Strukturen - Methoden – Praxisbeispiele*. Stuttgart: Kohlhammer Hurrelmann, K., Klotz, K. Haisch, J. (2014). *Prävention und Gesundheitsförderung*. Bern: HuberKirch W.Hoffmann, T. Pfaff, H. (Hrsg.). (2012). *Prävention und Versorgung*. Stuttgart: Thieme Langbein, K. Martin, H.P., Weiss,H. *(2017.) Bittere Pillen 2015-2017: Nutzen und Risiken der Arzneimittel.* Langbein, K. *(2016). Weißbuch Heilung.* München: Godman. Simon, M. (2017). *Das Gesundheitssystem in Deutschland: Eine Einführung in Struktur und Funktionsweise*. Göttingen: Hofgrefe Uhle, T., Treier, M. (2011). *Betriebliches Gesundheitsmanagement - Gesundheitsförderung in der Arbeitswelt – Mitarbeiter einbinden, Prozesse gestalten, Erfolge messen*. Berlin, Heidelberg: Springer Ulich, E., Wülser, M. (2014). *Gesundheitsmanagement in Unternehmen: Arbeitspsychologische Perspektiven.* Wiesbaden: Gabler

Module 3A: Complex Systems and Sport Psychology

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
3a	330 h	11 LP	1st Semester	1 Semester

1. Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungs-punkte
a) Lecture: Static and Dynamic Systems Theory (obligatory)	1 SWS/10,5 h	79,5 h	3 LP
b) Lecture and Exercise: Holistic Diagnosis and Control of Performance (obligatory)	2 SWS/21 h	99 h	4 LP
c) Lecture and Exercise: Applied Sports Psychology (obligatory) (Lecture 75% Seminar 25%)	2 SWS/21 h	995 h	4 LP

2. Lehrformen

Lecture/Lecture and Exercise

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

Acquisition of broad theory-based knowledge of:

- understanding of systems theory, cybernetics and complex adaptive systems.
- interrelationships of models for diagnostics and regulation in static and dynamic approaches as well as in holistic and reductionist approaches depending on gender, performance level and age.
- up-to-date methods for performance diagnostics and performance regulation.
- individual and group-oriented evaluation of intervention programs.
- methods for movement analysis, neuro- and psychophysiological condition and change diagnostics.
- influence of exercise and nutrition on human performance during aging.
- psychophysiology and its data acquisition and processing..
- applied Sports Psychology.
- Forms of mental training.
- sports psychology of team processes.
- basics of clinical psychology in connection with sport.

Schlüsselqualifikationen:

- Extensively developed skills for planning empirical studies as well as for analysis and implementation of the study results
- Comprehensive and systematic knowledge as a prerequisite for the independent application and transfer of specialized, empirical research and analysis methods to application-oriented and/or base-oriented questions (e.g. as part of a final thesis in the Master and/or doctorate)
- Improvement of the English language competence in spoken and written form

5. Inhalte:

Acquisition of comprehensive skills:

- to understand, communicate and apply group-specific prevention and intervention strategies
- for the evaluation of training effects in healthy, elderly and chronically ill sports people
- for the formulation of research-oriented questions and their investigation using diagnostic methods as well as for critical reflection of the results
- for interdisciplinary analysis of collected diagnostic data and its implementation in training management (design of training, therapy and nutrition programs, programs in competitive, leisure and health sports, optimization of the exercise and recovery cycle, etc.)
- to assess psychologically relevant aspects in the context of movement and sport.
- on the effects and methods of applied sports psychology

	▪ Anthropometry ▪ Methods for measuring body composition ▪ Biomechanical motion analysis. ▪ Biometric methods ▪ Nutrition and performance ▪ Psychophysiological measurement procedures ▪ Applied Sports Psychology ▪ Forms of Mental training ▪ Group processes in sport ▪ Psychological sports diagnostics
6.	Verwendbarkeit des Moduls Master of Science Sportwissenschaft
7.	Teilnahmevoraussetzungen None
8.	Prüfungsformen 8.1 Studienleistungen None 8.2 Modulteilprüfungen /Modulprüfung Exams from a), b) and c) (60 Min)
9.	Voraussetzungen für die Vergabe von Leistungspunkten Regular and active participation as well as the successful completion of examinations
10.	Stellenwert der Note in der Endnote According to the performance points of the module: 11/96
11.	Häufigkeit des Angebots Yearly
12.	Modulbeauftragter und hauptamtlich Lehrende Module representative: Prof. Dr. W. Schöllhorn Full-time faculty: Faculty of the Institute of Sports Science
13.	Sonstige Informationen **Recommended Literature:** Andersen M.B. & Hanrahan S.J. (2015) *Doing Exercise Psychology.* Human Kinetics. Leeds. Anshel, M.H. (2012) *Sport Psychology. From theory to practice.* Pearson Education, San Francisco Bertalamffy, L.v. (1949). *General System Theory.* In: Biologia Generalis. 1/1949, S. 114–129. Birklbauer, J. (2006) *Modelle der Motorik.* Aachen: Meyer & Meyer. Bischof, N. (1995) *Struktur und Bedeutung.* Göttingen Huber. Brand, R. (2012) *Sportpsychologische Intervention und Gesundheitsverhalten.* Saarbrücken, Akademikerverlag. Cacioppo, J. (2004) *Social Neuroscience: Key Readings in Social Psychology*, (2004): Psychology Press. *Holland J.H (2006). Studying Complex Adaptive Systems.* Journal of Systems Science and Complexity. 19 (1): 1–8. Craik,R.L. Oatis C.A. (1995) *Gait Analysis – Theory and application. St. Louis: Mosby.* Eberspächer, H. (2007) *Mentales Training. Das Handbuch für Trainer und Sportler*. München Copress Engbert, K. (2015) *Mentales Training im Leistungssport. Ein Übungsbuch für den Schüler- und Jugendbereich.* Neuer Sportverlag. Foerster,H.v. (2001*) Understanding understanding.* New York: Springer. Haber, P. (2009). *Leitfaden zur medizinischen Trainingsberatung: Rehabilitation bis Leistungssport.* Wien: Springer. Jowett S. & Lavallee D. (2007) *Social Psychology in Sport*. Human Kinetics. Leeds. McArdle W.D., Katch, F.I.h & Katch, V.L. (2014) *Exercise Physiology: Nutrition, Energy, and Human Performance* (International Edition, 8th Edition). Baltimore, Philadelphia: Lippincott Williams & Wilkins Meadows, D.H. (2008) *Thinking in Systems*. White River Junction: Chelseas publisher. Miller, J.H., Scott E. (2007) Complex adaptive systems: an introduction to computational models of social life*. Princeton University Press.* Schmidt R.A. & Lee T.D. (2014) *Motor Learning and Performance*. Human Kinetics. Leeds. Tassinary,L.G. Berntson, G.G. (2007) *Handbook of Psychophysiology. (3ed.) Cambridge: MIT.* Zentgraf K., & Münzert, J. (2014) *Kognitives Training im Sport.* Hogrefe. Göttingen, Bern

Module 4A: Related Transdisciplinary Aspects

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
4a	240 h	8 LP	2nd Semester	1 Semester

1. Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
a) Lecture and Small Group: Business Start-up (obligatory)	1 SWS/10,5 h	49,5 h	2 LP
b) Lecture and Small Group: Neuroscience (obligatory)	2 SWS/21 h	39 h	2 LP
c) Lecture: Personnel Management (obligatory)	1 SWS/10,5 h	49,5 h	2 LP
d) Lecture: Nutritional Concepts (obligatory)	1 SWS/10,5 h	49,5 h	2 LP

2. Lehrformen

Lecture, Small Group

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- Comprehensive and systematic knowledge of all essential aspects of setting up a business and establishing a company
- Experience in systematically developing, critically questioning and defending business models
- Experience in the preparation and critical discussion of business plans
- The ability to independently find out the current state of knowledge on setting up a business
- The ability to analyse leadership behaviour and in particular the identification of leadership traps
- Being able to reflect the phenomenon of leadership in various ways
- To know the prospects the opportunities and problems of neuroscience, especially in fields relevant to sports economics such as "neuromarketing"
- Knowledge and interpretation of different nutritional models
- In-depth knowledge, application and critical evaluation of different types of nutrition

Schlüsselqualifikationen:

- Rhetorical competence in presentation and communication
- Establishment of a company as a sole proprietor and part of teams of entrepreneurs
- The ability to analyse one's own and external management behaviour and provide feedback.
- Assessment competencies in the field of neuroscience
- Acquisition of up-to-date knowledge in neuroscience and its transfer to sports management
- Management competencies
- Comprehensive, specialized and systematic expertise on the latest state of knowledge about different types of nutrition
- The ability to reflect on different cultural influences on nutrition

5. Inhalte:

- Establishment of a company and its existence
- Business plan for individuals and teams
- Theories of leadership
- Recruitment of management personnel / Human Resource Management
- Neuroscientific methods and findings and their potential applicability in leadership and marketing.
- Transfer of neuroscientific findings to sports economic phenomena and approaches for management.
- Differences between collection and recycling.
- Nutrition models (e.g.: structure of diets, anthroposophical dietetics, ayurveda, food combining, medicinal fasting, macrobiotics, paleo, whole food, vegetarian diet)
- Culture-specific nutrition models (nutrition in the past and today)
- Dietetics
- Food, vegetable and animal nutrients, vital substances, micronutrients, foreign/contaminants; dietary fibre, secondary plant substances, water, minerals, bioactive substances
- Food quality
- Metabolism: maintenance metabolism, fat metabolism, carbohydrate metabolism, protein metabolism (biologic value)
- Age, gender and sport specifics
- Metabolic diseases, malnutrition, hypervitaminosis (obesity, diabetes II,...) - nutritional diseases
- Specific nutrition in e.g. immobilization, osteoporosis, diabetes mellitus, arterial hypertension, dysli-poproteinemia, sarcopenia, age, pregnancy

6. Verwendbarkeit des Moduls

	Master of Science Sportwissenschaft
7.	Teilnahmevoraussetzungen None
8.	Prüfungsformen 8.1 Studienleistungen None 8.2 Modulprüfung Test portfolio from a), b), c) and d)
9.	Voraussetzungen für die Vergabe von Leistungspunkten Regular and active participation as well as the successful completion of examinations
10.	Stellenwert der Note in der Endnote According to the performance points of the module: 8/96
11.	Häufigkeit des Angebots Yearly
12.	Modulbeauftragter und hauptamtlich Lehrende Module representative: Prof. Doppelmayr Full-time faculty: Faculty of the Institute of Sports Science
13.	Sonstige Informationen **Recommended Literature:** Baars, B. J., & Gage, N. M. (2010). *Cognition, brain, and consciousness: Introduction to cognitive neuroscience*. London : Academic Press. Bear M.F., Connors B.W. & Paradiso M.A. (2001) *Neuroscience. Exploring the brain.* Lippincott. Baltimore. Freeman; Robert L: (1981) Human Food Uses. A cross-cultural, comprehensive annotated Bibliography, Greenwood Press. Fröhlich, W. (Hrsg.) (2012). *Unternehmensgründung und Persönlichkeit*. Mering: Rainer Hampp. Furtner, M & Baldegger, U. (2016): *Self-Leadership und Führung*, Wiesbaden: Springer. Herzberg, U. (2010). *Mein Businessplan*. München: Haufe-Lexware. Kandel, E.R., Schwartz J.H., Jessel T.M., Siegelbaum S.A. & Hudspeth A.J. (2013) *Principles of neural science*. McGraw Hill Companies Kraus. S. (Hrsg.) (2011). *Entrepreneurship – Fallstudien. Unternehmensgründung, Intrapreneurship und Innovationsmanagement.* Wien: Springer Vienna. Luthe, D. (2001). "*Fundraising als integrierte Kommunikation." Fundraising. Ein Handbuch für Grundlagen, Strategie und Instrumente*. Wiesbaden: Springer Peters, T. (2015): *Leadership,* Wiesbaden: Springer Peters, T. & Ghardiri, A. (2014) *Neuroleadership - Grundlagen, Konzepte, Beispiele: Erkenntnisse der Neurowissenschaften für die Mitarbeiterführung.* Springer Verlag. Shilbury, D., Quick, S., & Westerbeek, H. (2003). *Strategic sport marketing*. Sydney: Allen & Unwin. Singler, A. (2014). *Businessplan*. München: Haufe-Lexware. Sizer F.S. & Whitney,E. (2014) Nutrition – Concepts & Controversies. Belmont: Wadworth. Walenta, Chr. & Kirchler, E. (2011): *Führung*, Wien: utb facultas.

Module 5A: Movement and Wellbeing projects

Kennnummer:	Work load	Leistungspunkte	Studiensemester	Dauer
5a	330 h	11 LP	2nd Semester	2 Semesters

1. Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
a) Project : Movement and Wellbeing (obligatory)	3 SWS/ 31,5 h	88,5 h	4 LP
b) Lecture: Applied Psychology (obligatory)	2 SWS/ 21 h	99 h	4 LP
c) Seminar: Sport, Movement and Brain Activity (obligatory)	1 SWS/ 10,5 h	79,5 h	3 LP

2. Lehrformen

Lecture, Seminar and Project

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- Application of various psycho-physiological measuring methods
- Planning, execution and analysis of psycho-physiological experiments for individual systems
- Planning, execution and analysis of psycho-physiological experiments for social systems
- Advanced knowledge of the interaction of movement, brain activity and neuronal correlates of motor learning

Schlüsselqualifikationen:

- Methods expertise
- Development of experimental intervention designs
- Collection and analysis of data collected using medical biometrics methods
- Error management
- Determination of reliability and validity of methods of medical biometry
- Application and development of intervention concepts in the field of sports psychology

5. Inhalte:

- Applied medical biometry (motion patterns, speech patterns, EEG, EMG, ECG, infrared thermo-graphy, GDV, skin resistance, iris photography,...)
- Electromagnetism of the human body and the environment
- Ecological physics
- General biomagnetism
- Body impedance analysis
- Interpersonal interaction and performance in social systems (mental and cardiac coherence)
- Applied methods of sports psychology
- Current psychological questions and methods in the sports context of social psychology, developmental psychology, gerontopsychology, clinical psychology, biological psychology

6. Verwendbarkeit des Moduls

Master of Science Sportwissenschaft

7. Teilnehmervoraussetzung

None

8. Prüfungsformen
8.1 Studienleistung

Test portfolio from a)

8.2 Modulprüfung
Exams from b) and c) (60 Min).

9. Voraussetzungen für die Vergabe von Leistungspunkten

Regular and active participation as well as the successful completion of examinations

10.	Stellenwert der Note in der Endnote According to the performance points of the module: 11/96
11.	Häufigkeit des Angebots Yearly
12.	Modulbeauftragter und hauptamtlich Lehrende Module representative: Prof. W. Schöllhorn Full-time faculty: Faculty of the Institute of Sports Science
13.	Sonstige Informationen: **Recommended Literature:** Brukner,P. & Khan, K. (2014) Clinical Sports medicine. (4th ed.) Sydney: McGraw Hill. Cacioppo,J. Tassinary,L.G. & Berntson,G. G. (2007) Handbook of Psychophysiology. Cambridge: Cambridge University Press. Cael, C. J. (2011) *Functional Anatomy: Musculoskeletal Anatomy, Kinesiology, and Palpation for Manual Therapists*. Walters Kluver. Cohen,M.X. (2014) *Analyzing Neural Time Series Data - Theory and Practice*. Cambridge: MIT Press. Naval D.S. (2013*) Applied Psychology*, Lambert Academic Publishing Fuller, W. A. (2006) *Measurement Error Models* Groome D., Eysenck M. & Esgate, A. (2016) *An Introduction to Applied Cognitive Psychology:* Psychology Press Book Hilton W. (2015) *Applied Psychology: Driving Power of Thought.* Palala Press Kazdin, A. E. (2010) *Single-Case Research Designs: Methods for Clinical and Applied Settings*. Michael Kjær, Michael Krogsgaard, Peter Magnusson, Lars Engebretsen, Harald Roos, Timo Takala, Savio L-Y Woo (2008) *Textbook of Sports Medicine: Basic Science and Clinical Aspects of Sports Injury and Physical Activity.* Wiley-Blackwell. Monteith,J. Unsworth,M. (2013) *Principles of Environmental Physics* - 4th Edition- Plants, Animals, and the Atmosphere. North Holland: Elsevier. Muchinsky P.M. (2008) *Psychology Applied to Work: An Introduction to Industrial and Organizational Psychology*. Hypergraphic Press. Williams J.M. (2009) *Applied Sport Psychology: Personal Growth to Peak Performance*. McGraw Hill Press.

Module 6: Specialized Internship

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
6	480 h	16 LP	2nd and 3rd Semester	2 Semesters

1. Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
a) Internship[1, 2, 3] (compulsory elective)		450 h	15 LP
b) Colloquium: Internship Colloquium (compulsory elective)	1 SWS/10,5 h	19,5 h	1 LP

2. Lehrformen

Individual Internship and Internship Colloquium

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- Application of the study contents in professional practice in the desired professional profile
- Familiarization with possible fields of work and professions for your own professional future at home and/or abroad

Schlüsselqualifikationen

- Professional competence
- Application of scientific knowledge in practical contexts
- The ability to self-reflect
- Internships abroad: intercultural competence, language competence
- Presentation competence and experience in the application process
- Active networking

5. Inhalte:

- Familiarization with the fields of application of the course contents in company or other professional practice

6. Verwendbarkeit des Moduls

Master of Science Sportwissenschaft

7. Teilnahmevoraussetzungen

None

8. Prüfungsformen

8.1 Studienleistungen

Internship report from a)

8.2 Modulprüfung

None (ungraded module)

9. Voraussetzungen für die Vergabe von Leistungspunkten

Regular and active participation as well as the successful completion of examinations

10. Stellenwert der Note in der Endnote

11. Häufigkeit des Angebots

Yearly

12. Modulbeauftragter und hauptamtlich Lehrende

Module representative: Dr. N. Schütte, Dr. E. Lachtermann, Dr. H. Beckmann.

13. Sonstige Informationen

[1] Internships can be completed for all profiles at home and abroad (preferably at state-authorized and recognized institutions) and must be applied for in advance. Internships should be completed at an institution with an affinity for sports science and should be related to the chosen Master's profile. In Study Programme B "Health Promotion and Therapy through Sport", the internship must be completed in a preventive or rehabilitative (inpatient or outpatient) facility designed for sports medicine and performance diagnostics. In that period, at least 30 hours must be spent as observation hours including a teaching exercise in therapeutic sports groups (heart sports, lung sports, cancer sports, posture and movement). The obligation to find a suitable internship is incumbent on the students; the responsible institute will support the students in choosing an internship and carrying out the internship. Students are recommended to complete a semester abroad using the university mobility programs.
The recognition of the selected internship is the responsibility of the institute's management.

[2] Prerequisite for the award of credit points for the internship is proof of active participation. Active participation must be certified by the authorised institution. The certificate must contain the name of the institution, personal details (first name, surname, date of birth, matriculation number) and the type and duration of the activity.

[3] The internship can also be completed in the 1st or 4th semester and can be split a maximum of two times.

Module 7A: Movement and Wellbeing in Ayurveda and Yoga

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
7a	240 h	8 LP	3rd Semester	1 Semester

1.	Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
	a) Advanced Seminar: Ayurveda and Yoga I (compulsory elective)	2 SWS/21 h	99 h	4 LP
	b) Advanced Seminar: Ayurveda and Yoga II (compulsory elective)	2 SWS/21 h	99 h	4 LP

2. Lehrformen

Advanced seminar (if necessary, block-seminar abroad)

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- The ability to teach basic forms of Hatha Yoga
- Basic knowledge of the philosophy and history of Yoga and Ayurveda
- Basic knowledge in ayurvedic diagnostics and therapy
- Age- and group-specific application of Ayurveda and Yoga

Schlüsselqualifikationen

- The ability to teach basic forms of Yoga
- Applicable competence of specific knowledge in connection with a practical setup
- The ability to reflect traditional yoga and Ayurveda against the background of Western science

5. Inhalte

- Philosophy and History of Ayurveda and Yogas
- Practical Yoga
- Phytotherapy and drainage
- Chakras
- Manual therapy
- Forms of Yoga
- Breathing techniques
- Psychological and medical effects of Yoga and Ayurveda
- Ayurvedic diagnostics and therapy

6. Verwendbarkeit des Moduls

Master of Science Sportwissenschaft

7. Teilnahmevoraussetzungen

None

8. Prüfungsformen

8.1 Studienleistungen

None

8.2 Modulprüfung

Term paper from b)

9. Voraussetzungen für die Vergabe von Leistungspunkten

Regular and active participation as well as the successful completion of examinations

10. Stellenwert der Note in der Endnote

According to the performance points of the module: 8/96

11. Häufigkeit des Angebots

Yearly

12. Modulbeauftragter und hauptamtlich Lehrende

Module representative: Prof. Dr. W. Schöllhorn
Full-time faculty: Faculty of the Institute of Sports Science and/or
Lecturers at the partner university (e.g. university from India)

13.	Sonstige Informationen **Recommended Literature:** Bond, W.J. (2012) The Science of Yoga: The Risks and the Rewards. Paperback New York: Schuster & Schuster. Pankai, T. (2010) Principles and Practice of Ayurvedic Medicine. Chaukhambha Orientalia Varanasi. Pole, S. (2006) Ayurvedic Medicine: The Principles of Traditional Practice. Churchill Livingstone. Radin, D. (2015) Supernormal. Science, Yoga, and the Evidence for Extraordinary Psychic Abilities. New York: Random House. White,G. (2007) Yoga Beyond believe. Berkeley: North Atlantic Books.

Module 8A: Movement and Wellbeing in Traditional Chinese Medicine

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
8a	240 h	8 LP	3rd Semester	1 Semester

1.	Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
	a) Advanced Seminar: Traditional Chinese Medicine and Qi-gong I (compulsory elective)	2 SWS/21 h	99 h	4 LP
	b) Advanced Seminar: Traditional Chinese Medicine and Qi-gong II (compulsory elective)	2 SWS/21 h	99 h	4 LP

2. Lehrformen

Advanced seminar (if necessary, Block-seminar abroad)

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- Advanced knowledge of the philosophical and historical foundations of Traditional Chinese Medicine
- Variable application of the five transformation phases
- Application of basic tongue and pulse diagnostics
- Recognizing and assessing the possibilities and limitations of TCM applications
- Planning, implementation and analysis of Qigong interventions
- Transfer of the TCM system to western boundary conditions

Schlüsselqualifikationen:

- Ability to teach basic forms of Qigong and acupressure
- Ability to fundamentally reflect the five phases of transformation
- Application of basic knowledge of the meridian system
- Ability to translate the basic knowledge about TCM into an experimental design
- Ability to reflect TCM against the background of Western science

5. Inhalte:

- Philosophical basis of Traditional Chinese Medicine
- Foundations in Qigong, Tuina-massage, Acupressure, moxibustion, and nutrition
- Knowledge about the meridian system and acupoints
- Experimental evidence and design for proving the effects of acupuncture
- Experimental designs for proving TCM

6. Verwendbarkeit des Moduls

Master of Science Sportwissenschaft

7. Teilnahmevoraussetzungen

None

8. Prüfungsformen

8.1 Studienleistungen

None

8.2 Modulprüfung

Term paper from a) or b)

9. Voraussetzungen für die Vergabe von Leistungspunkten

Regular and active participation as well as the successful completion of examinations

10. Stellenwert der Note in der Endnote

According to the performance points of the module: 8/96

11. Häufigkeit des Angebots

Yearly

12. Modulbeauftragter und hauptamtlich Lehrende

Module representative: Prof. Dr. W. Schöllhorn
Full-time faculty: Faculty of the Institute of Sports Science and/or
Faculty of the partner university (e.g. Shanghai Sport University)

13.	Sonstige Informationen **Recommended Literature:** Maciocia,G. (2005) The Foundations of Chinese Medicine, 2nd edn., Churchill Livingstone, Edinburgh, London, New York, 2005 Li, J. & Zhu J. (2013) An Illustrated Handbook of Chinese Qigong Forms from the Ancient Texts. Singing Dragon. Stevenson,X. Shusheg,T. & Chun-Su,Y. (20??) Handbook of Traditional Chinese Medicine Vol 1-3. Singapore: World Scientific. Whitfield R. Bong,C. (2009)The Acupuncture Handbook of Sports Injuries & Pain. Hidden Neelde Press.

Modul 9: Key Qualifications

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
9	360 h	8 LP	2nd Semester	1 Semester

1. Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
a) Elective Courses in the Areas of Social Competence, Methodological Competence, Self-Competence, Competence to Act [1,2,3,5,7]	1-2 SWS/10,5-21 h	39-49,5	2 LP
b) Elective Courses in the Fields of Social Competence, Methodological Competence, Self-Competence, Competence to Act [1,2,3,5,7]	1-2 SWS/10,5-21 h	39-49,5 h	2 LP
c) Scientific Foundations of Specialist Science in the Field of Study [1,2,4,6,8,9]	1-2 SWS/10,5-21 h	39-49,5 h	2 LP
d) Scientific Foundations of Specialist Science in the Field of Study [1,2,4,6,8,9]	1-2 SWS/10,5-21 h	39-49,5 h	2 LP

2. Lehrformen

Lecture, Seminar and Exercise

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele:

- Deepen and expand existing key qualifications
- Gain new key qualifications of your own choice
- Familiarization with selected in-depth basic knowledge from specialist offers of the parent discipline and their application to a specific specialist area

Schlüsselqualifikationen:

- See contents
- In-depth knowledge of English (written and spoken)

5. Inhalte:

1. Interdisciplinary key qualifications

- Social and societal competence (e.g. negotiation, conflict management, working with groups / teams, leadership competence, intercultural competence, team ability)
- Methodological competence (e.g. media competence, information competence, problem solving, moderation/presentation, writing techniques, techniques of scientific work)
- Self competence (e.g. time and stress management, motivation, creativity, self-management, resilience, personal development)
- Competence in action (e.g. rhetoric, business fundamentals, foreign language competence)

2. Vocational field-specific key qualifications:

- selected basics of science
- Selected fields of application of the specialist sciences

6. Verwendbarkeit des Moduls

Master of Science Sportwissenschaft

7. Teilnahmevoraussetzungen

None

8. Prüfungsformen

8.1 Studienleistungen

8.2 Modulprüfung

None (ungraded module)

9. Voraussetzungen für die Vergabe von Leistungspunkten

Regular and active participation as well as the successful completion of examinations

10. Stellenwert der Note in der Endnote

11. Häufigkeit des Angebots

Yearly

12. Modulbeauftragter und hauptamtlich Lehrende

	Module representative: Dr. B. Schumann-Schmid + further faculty Full-time faculty: External faculty
13.	Sonstige Informationen Some courses are held in English [1] Catalogue of eligible events will be announced by the Institute before the start of the module [2] The two courses in the cross-occupational and occupational field-specific areas of competence must each be from different areas of competence [3] Degree Program A: e.g. Studium Generale, Political Science, Journalism, ISSK, FB 02, Institute of Sports Science - Degree Programs B and C [4] Degree Program A: e.g. Institute of Medical Biometry, Epidemiology and Computer Science according to list of recommended courses, Psychology, Sociology, Institute of Sports Science – Degree Program B

Module 10: Master's Thesis

Kennnummer:	work load	Leistungspunkte	Studiensemester	Dauer
10	960 h	32 LP	3rd and 4th Semester	2 Semesters

1. Lehrveranstaltungen	Kontaktzeit	Selbststudium	Leistungspunkte
a) Master's Thesis (compulsory elective)		750 h	25 LP
b) Colloquium (compulsory elective)	1 SWS/10,5 h	49,5 h	2 LP
c) Oral Exam (30 Min)		150 h	5 LP

2. Lehrformen

Colloquium

3. Gruppengröße

See curricular standards from the 1st of July, 2013

4. Lernziele

- Independently manage a scientific project
- The finding, analysis, synthesis and critical reflection of relevant information
- Addressing a research problem with the right methodology and in compliance with ethical guidelines
- Use of knowledge acquired in their studies for discussion with teachers and fellow students, critically reflection of opinions and presentation of a research project using the right scientific expressions
- Explain and defend the acquired knowledge to a group of technically competent listeners

Schlüsselqualifikationen

- Development and reflection of scientific contexts
- Searching for and evaluating information
- Conceptual and systematic work
- Time management
- In-depth methodological competence
- Critical reflection of scientific texts
- Presentation skills
- Interpersonal communication and interaction techniques
- Moderation skills
- Communication and interaction in scientific discourse

5. Inhalte

- Generation of the principal research question
- Identification of the research sketch and research problem
- Choosing the right method to solve the problem
- Theoretical treatment and reflection of a topic
- Derivation of recommendations for action
- Writing a scientific Master's thesis
- Discussion of the results of the Master's thesis
- Exchange with teachers and fellow students

6. Verwendbarkeit des Moduls

Master of Science Sportwissenschaft

7. Teilnahmevoraussetzungen

Completion of modules M1 to M5

8. Prüfungsformen

8.1 Studienleistungen

None

8.2 Modulprüfung

Master's thesis (6 months) and oral examination (30 min)
Module grade: Mean value of master thesis and oral examination, weighted according to LP in each case

9. Voraussetzungen für die Vergabe von Leistungspunkten

Regular and active participation as well as the successful completion of examinations

10.	Stellenwert der Note in der Endnote According to the performance points of the module: 32/96
11.	Häufigkeit des Angebots Yearly
12.	Modulbeauftragter und hauptamtlich Lehrende Module representative: Prof. Dr. H. Preuß Full-time instructors: Faculty of the Institute of Sports Science
13.	Sonstige Informationen None