



RUB

RUHR-UNIVERSITÄT BOCHUM

INTERNATIONAL COURSE CATALOGUE

WiSe 2010/2011

Courses taught in English
at the Ruhr-Universität Bochum

RUBiss
INTERNATIONAL STUDENT SERVICES

International Office
Gebäude FNO
Universitätsstrasse 150
44780 Bochum

Email: rubiss@rub.de
www.international.rub.de/rubiss

RUBiss
INTERNATIONAL STUDENT SERVICES

Dear student, dear researcher, dear guest,

this is the International Course Catalogue of the Ruhr-Universität Bochum, a project realized by RUBiss – RUB international student services at the International Office.

The International Course Catalogue is designed for international students, staff and all those who want to attend English language courses at the RUB.

It gives an overview on RUB's foreign language offers – for international students who want to organise their semester programme as well as students planning on studying in Bochum or partners and guests wanting to get a general idea on RUB's international courses and programmes.

The catalogue informs about RUB's international degree programmes as well as single courses and modules taught in English, for Bachelor and Master as well as for PhD-students. There are also courses marked explicitly as suitable for exchange students.

On the following pages you will find information about the course or programme, the requirements, as well as time and date. Furthermore the catalogue informs about crediting and contact persons. This shall make it easier to attend classes – also of other faculties –and integrate them into the regular study program.

RUBiss has been established to suit the special needs of international students and combines already existing services with new projects to help international students in coping with study-related problems.

The RUBiss-Team will be helping you with questions about living and studying in Germany and offers you support and advice in all situations.

We hope that you will find the International Course Catalog a helpful guide for your semester programme and wish you a good start for the new semester!

If you have further questions don't hesitate to contact the RUBiss-Team!

Best wishes,
Your RUBiss-Team.

CONTENT

INTERNATIONAL STUDY PROGRAMMES

MASTER OF BIOCHEMISTRY	3
MASTER OF CHEMISTRY	4
COMPUTATIONAL ENGINEERING	5
PHD IN INTERNATIONAL DEVELOPMENT STUDIES.....	6
MASTER OF ARTS IN DEVELOPMENT MANAGEMENT	7
M.SC. RESOURCES AND ENERGY (GEOSCIENCES).....	8
JOINT EUROPEAN MASTER'S IN INTERNATIONAL HUMANITARIAN ACTION	9

INTERNATIONAL COURSES

FACULTY OF CHEMISTRY AND BIOCHEMISTRY.....	10
COMPUTATIONAL ENGINEERING	11
INSTITUTE OF DEVELOPMENT RESEARCH AND DEVELOPMENT POLICY	15
FACULTY OF EAST ASIAN STUDIES.....	22
JAPANESE HISTORY	22
FACULTY OF ECONOMICS	24
FACULTY OF GEOSCIENCE.....	30
INTERDISCIPLINARY CENTRE OF ADVANCED MATERIALS SIMULATION	50
FACULTY OF LAW.....	51
INSTITUT FÜR NEUROINFORMATIK	58
FACULTY OF MATHEMATICS	59
FACULTY OF PHILOLOGY	61
ENGLISH DEPARTMENT.....	61
INSTITUTE FOR MEDIA STUDIES	62
FACULTY OF PHILOSOPHY AND EDUCATION	63
INSTITUTE OF PHILOSOPHY	63
INSTITUTE OF EDUCATIONAL SCIENCE.....	67
FACULTY OF PHYSICS AND ASTRONOMY	68
FACULTY OF PSYCHOLOGY	72
FACULTY OF SOCIAL SCIENCE	76

PHD COURSES

INSTITUTE FOR DEVELOPMENT RESEARCH AND DEVELOPMENT POLICY	86
---	----

PUBLIC EVENING LECTURE

INSTITUTE FOR MEDICAL ETHICS AND HISTORY OF MEDICINE	90
--	----

LANGUAGE COURSES

CENTER FOR FOREIGN LANGUAGE TRAINING	91
--	----

FACULTY OF CHEMISTRY AND BIOCHEMISTRY

<http://www.rub.de/chemie>

Contact:

Dr. Manfred Groß

Tel: 0234/32-24571

Email: manfred.h.gross@rub.de

MASTER OF BIOCHEMISTRY

Language: English

Degree: MSc

Requirements: A qualified BSc (= a BSc with an average mark better than 2.5) in Biochemistry or a related subject, such as Molecular Biology, Biotechnology, Chemical Biology, or Chemistry with a major in Biochemistry)

Description:

The Master Course in "Biochemistry" builds on the foundations laid by a BSc in Biochemistry or a related subject. It constitutes the second step towards a comprehensive education and training in the sciences and methods necessary to understand and exploit the molecular and chemical basis of biological and physiological processes. The goal of this course is to enable the student to independently apply the theoretical and technical knowledge gained to tackle and solve open questions in the life sciences, either in academia or in industry.

To reach this goal students will receive up to 26 hours of teaching per week over a period of 3 semesters, a total of 77.5 hours, comprising 16 hrs of lectures, 12 seminars, and a full 49.5 practicals. In the fourth semester experiments for the Master thesis project will be performed with the goal to submit a thesis after 6 months.

A unique feature of the MSc Biochemistry in Bochum is the possibility to choose between five Focal Point Programmes in which all courses starting in the 2nd semester are geared towards the chosen topic. Topics include Biochemistry of the Nervous System, Biomolecular Chemistry, Molecular Medicine, Proteins: Structure and Function, and Molecular Biology and Biotechnology of Plants and Microorganisms.

Further highlights of this Master Course include compulsory practical training in experiments that use isotopes, and a practical course in the handling of experimental animals, which is conducted in collaboration with the company Bayer HealthCare in Wuppertal.

The Faculty of Chemistry and Biochemistry appreciates if their Master students choose to spend one or more semesters abroad. The faculty supports this choice by unbureaucratically accepting courses taken abroad as equivalent if they fit the general philosophy of the Master Programme in Biochemistry at RUB.

Application Deadline: deadline for international students: 15/07/11

Begin: 11/10/2010

MASTER OF CHEMISTRY

Language: English

Degree: MSc

Requirements: A qualified BSc (= a BSc with an average mark better than 2.5) in Chemistry or a related subject

Description:

The Master Course in "Chemistry" builds on the foundations laid by a BSc in Chemistry or a related subject. It constitutes the second step towards a comprehensive education and training in chemistry comprising all aspects from organic and inorganic synthesis to physical and theoretical descriptions of chemical reactions. The goal of this course is to enable the student to independently apply the theoretical and technical knowledge gained to tackle and solve open questions in chemistry, either in academia or in industry.

To reach this goal students will receive a research orientated education comprising lectures and seminars but also, to a large extent, practicals. The first and second semester aim to provide an in depth-understanding in inorganic chemistry, organic chemistry and physical chemistry through lectures as well as a practicals in selected disciplines. The third semester allows the students to select a specialization practical including a 3-month practical. In the fourth semester experiments for the Master thesis project will be performed with the goal to submit a thesis after 6 months.

A unique feature of the MSc in Chemistry at the Ruhr-University Bochum is the possibility to choose between a number of focal point programmes as specialization including organic, inorganic, physical, analytical, technical and theoretical chemistry as well as interdisciplinary programmes such as functional materials. The practicals are mainly performed in the different research groups using state of the art research equipment thus guiding the students into research at an early stage. The research groups with PhD students and PostDocs from all over the world provide the basis for an education in an international environment.

The Faculty of Chemistry and Biochemistry appreciates if their Master students choose to spend one or more semesters abroad. The faculty supports this choice by unbureaucratically accepting courses taken abroad as equivalent if they fit the general philosophy of the Master Programme in Chemistry at RUB.

Application Deadline: no deadline for German students, general deadline for international students: 15/01/11

Begin: 11/10/2010

COMPUTATIONAL ENGINEERING

<http://compeng.rub.de>

Contact:

Dipl.-Ing. Jörg Sahlmen
Tel: 0234/32-22103
Email: comp-eng@rub.de

Julia Lippmann, M.A.
Tel: 0234/32-25485
Email: julia.lippmann@rub.de

COMPUTATIONAL ENGINEERING

Language: English

Degree: Master of Science

Requirements: A B.Sc. or comparable degree in an engineering sciences subject; profound English language skills, both written and spoken

Description:

The master's programme Computational Engineering focuses on the consolidation of knowledge in computer-oriented methods of Engineering Sciences. It provides to students key-skills in engineering mechanics, mathematics and computer science required for innovatively designing and analysing high-tech engineering systems and materials. Besides, the programme conveys so-called soft skills like the capacity for teamwork, the ability to manage conflict situations, and communication skills. It is exactly this unique blend of computer- and engineering-related knowledge with these soft skills which accounts for the high academic standard of the programme. The programme is thus especially designed to qualify students for the requirements of today's job market for engineers, opening them the doors to upper and top positions in the industry and at institutions of higher education.

The master's programme Computational Engineering has the following goals:

- The imparting of skills in the field of computer-oriented methods in Engineering Sciences to qualify students to perform complex tasks with an emphasis on simulation and modelling independently and on their own responsibility. The master's programme thus qualifies students for positions in research and development with managerial responsibility.
- The imparting of skills for writing academic theses on a post-graduate level.

In addition, the programme is aimed at enabling graduates to solve challenging problems in research and practice. At the same time, it aims at opening them the doors to various occupational fields on the international job market on the basis of 'global competencies'. In order to achieve these goals great emphasis is placed on research.

In its concept, the RUB Master programme is designed so as to include courses offered by various faculties, mainly the faculties of Civil- and Environmental Engineering (course coordination), Mechanical Engineering and Mathematics to offer students a highly sophisticated education, breeding tomorrow's specialists and executives.

For further details about our courses please go to:

<http://compeng.rub.de>: Sub-item 'Curriculum'

INSTITUTE OF DEVELOPMENT RESEARCH AND DEVELOPMENT POLICY

<http://www.ruhr-uni-bochum.de/iee>

Contact:

Dr. Katja Bender
Tel: 0234/32-25149
Email: Katja.Bender@rub.de

PHD IN INTERNATIONAL DEVELOPMENT STUDIES

Language: English

Degree: PhD

Requirements: 1. Qualified university degree (Master or an equivalent to the German Diploma or Staatsexamen) with an overall grade equivalent to 2.7 (fully satisfactory) in the German grading system after completion of relevant studies with a duration of at least 4 years , or
2. Qualified degree with an overall grade equivalent to 1.7 (fully good) in the German grading system after completion of relevant studies with a duration of at least three years plus preparatory studies for the PhD of usually three semesters.

For international degrees the equivalence will be judged during the application process.

Candidates who have to follow preparatory studies before admission to the PhD in International Development Studies can be accepted for such preparatory studies at the Ruhr-University Bochum

Description:

Starting from winter 2007, the Institute of Development Research and Development Policy offers a 3-year English-language PhD program in International Development Studies. It is implemented by the Institute of Development Research and Development Policy on behalf of the Faculties of Geography, Law, Social Science, and Economics. Annually up to 12 PhD candidates are accepted to the program. focus. The PhD program in International Development Studies is a combination of working on individual PhD research projects as well as participating in selected teaching modules. Teaching modules deal with developmental issues from a multidisciplinary perspective. These seminars are complemented by courses on research methods and statistical analysis. Regular presentation and discussion of individual research projects form part of the semi-annual „Research Colloquium“ in which all PhD candidates as well as supervisors take part. A field research phase in the fourth semester forms an integral part of the PhD-program. Courses on “Generic Skills” include seminars on Scientific Writing, Scientific Presentation and Professional (Scientific) Communication. They aim at the training of key competences and are offered in cooperation with the Ruhr-University Bochum Research School.

Application Deadline: 03/05/2011

Begin: 11/2011

INSTITUTE OF DEVELOPMENT RESEARCH AND DEVELOPMENT POLICY

www.development-research.org

Contact:

Meik Nowak, Course Coordinator

Tel: 0234/32-22458

Email: meik.nowak@rub.de

MASTER OF ARTS IN DEVELOPMENT MANAGEMENT

Language: English

Degree: Master

Requirements: An above average B.A. or relevant degree in political science, social science, law, economics or geography or in other subjects related to the planning and evaluation of development programs and projects career experience in a relevant field; preference is given to candidates whose employers offer a reintegration guarantee. For DAAD scholarship applicants within the program "postgraduate courses with relevance to developing countries" at least two years career experience is required, other applicants shall demonstrate practical experience at least through a relevant internship. Minimum certified proficiency in written and spoken English - TOEFL: 79-80 points internet based (equivalent to 213 points computer based or 550 paper based) or IELTS: band 6

Description:

The MADM is addressed to young professionals from all over the world with a B.A. or relevant degree and practical experience with relevance for development management who need further academic qualification for their future professional career in a field related to development management and cooperation.

Since winter 2000, the Institute of Development Research and Development Policy has offered an international English-language Master Program in Development Management. Since May 2002, the program has also been offered at the University of the Western Cape, South Africa; originally as part of the DAAD initiative "German Programs of Study Abroad" and now as part of the DAAD funded "South African - German Centre for Development Research and Criminal Justice". The duration of each program cycle is three semesters (18 months). For each intake, up to 25 students are accepted in Bochum and up to 20 students in Cape Town.

The course starts every two years with the next intake in 2010. For international participants a German language course is offered from beginning of August. The program itself starts in September with a Summer School on Research Methods and Development Practice. In this introductory Summer School you will also meet with the students from the Cape Town intake, who started earlier and have by then already completed their first semester. Apart from coursework the Summer School usually includes a seminar on Inter-cultural Communication and Team Building as well as some excursions for you to get more familiar with Bochum, the region and Germany.

Application Deadline: 31.12.2011

Begin: 13/09/2010 (for now) and September 2012

FACULTY OF GEOSCIENCES

INSTITUTE FOR GEOLOGY, MINERALOGY AND GEOPHYSICS

www.rub.de/sediment

Contact:

Prof. Dr. Adrian Immenhauser

Tel: 0234/32-28250

Email: adrian.immenhauser@rub.de

M.SC. RESOURCES AND ENERGY (GEOSCIENCES)

Language: English

Degree: Master of Science

Requirements: B.Sc. in geosciences or related natural sciences, English language proficiency (written and spoken), and sufficient physical fitness to perform fieldwork

Description:

The Institute for Geology, Mineralogy and Geophysics offers a comprehensive two-year (four terms) M.Sc. programme in fundamental and applied geosciences.

The goal of this M.Sc. programme is to provide students with a solid background in geoscience disciplines that are particularly relevant for a subsequent employment in the industry (mainly hydrocarbon industry).

Main topics covered include sedimentology/stratigraphy, geophysics/seismic interpretation and structural geology/tectonics.

Additional topics include aspects of geo-engineering and hydrogeology.

Frontal class room instructions are complemented by practical laboratory courses and hands-on field training.

All classes are taught in English.

Application Deadline: N.A.

Begin: N.A.

INSTITUTE FOR INTERNATIONAL LAW OF PEACE AND ARMED CONFLICT

www.ifhv.rub.de

Contact:

Markus Moke

Tel: 0234/32-28258

Email: Markus.Moke@rub.de

JOINT EUROPEAN MASTER'S IN INTERNATIONAL HUMANITARIAN ACTION

Language: English

Degree: Master of Arts in Humanitarian Action

Requirements: Master's degree or equivalent

Description:

The Joint European Master's in International Humanitarian Action is a inter-university, multidisciplinary postgraduate programme that provides high quality academic education and professional competencies for personnel working or intending to work in the area of humanitarian action. This European Master's Degree was created in 1993 as a result of concerted efforts on the part of the Network On Humanitarian Action (NOHA) Universities, working in close collaboration with the European Commission's Humanitarian Aid Office (ECHO) and Directorate-General for Education and Culture. This initiative was a response to a growing need from the humanitarian assistance community for higher educational qualifications specifically suited to addressing complex humanitarian emergencies. In addition to collaboration and support from the European Union, the programme has the backing of non-governmental organisations (NGOs), inter-governmental organisations (IGOs), and other actors of the humanitarian relief community with whom the Network has strong collaborative links. More than 15 years of experience have proved the Network's capacity to educate and train highly committed, interdisciplinary persons who can act at all levels of humanitarian relief operations and who can function in a variety of ways to enhance the delivery of humanitarian assistance and sustainable actions. Over 1800 NOHA graduated professionals work in the field of humanitarian relief and international co-operation as managers, administrators, researchers, evaluators, monitors, consultants, and representatives of international organisations and institutions. They hold positions of responsibility in all kinds of national and international inter-governmental and non-governmental organisations both in the field and at headquarters all around the world.

Application Deadlines:

ERASMUS MUNDUS 15/12/2010

NOHA and NOHA Mundus 15/03/2011

Begin: First week of September with the Intensive Programme (IP)

FACULTY OF CHEMISTRY AND BIOCHEMISTRY

www.rub.de/chemie

Contact:

Dr. Manfred Groß

Tel: 0234/32-24571

Email: manfred.h.gross@rub.de

As described above, all Master courses of the Faculty of Chemistry and Biochemistry are offered in English. In addition, the following Bachelors course is also held in English:

COURSE TITLE BIOCHEMIE III - BIOCHEMISTRY III

Language: English

Department: Biochemie I - Rezeptorbiochemie / Biochemistry I - Receptor Biochemistry

Degree programme: BSc

Course type: Lecture

Credit Points: 4

Requirements: none

Course description:

Biochemistry of eukaryotic cells

Proofs of academic achievement: written exam ("Semesterabschlussklausur")

Teacher/Lecturer: Prof. Dr. Michael Hollmann

Room: NC6/99

Day: Wednesday

Time: 13.15 – 15.00

Begin: 13/10/2010

COMPUTATIONAL ENGINEERING

<http://compeng.rub.de>

Contact:

Dipl.-Ing. Jörg Sahlmen
Tel: 0234/32-22103
Email: comp-eng@rub.de

Julia Lippmann, M.A.
Tel: 0234/32-25485
Email: julia.lippmann@rub.de

DYNAMICS OF STRUCTURES

Language: English

Department: Computational Engineering

Degree programme: Master

Course type: Lecture (2 h) / Exercise (2 h)

Credit Points: 6

Requirements: A first degree in engineering sciences (e.g. B.Sc.). A profound previous knowledge in fluid mechanics, especially mechanics of solids and numerical methods in dynamics.

Course description:

The lecture recapitulates and deepens the methodology of the calculation of single- and multi-degree-of-freedom oscillations of structures. Dynamical analyses are based on simplified models of structures and on the application of modal analysis. A second focus is put on the modelling and the computation of random vibrations of structures. The spectral method for a stationary, broad-banded excitation mechanism like wind excitation is introduced. The response spectrum method for the treatment of earthquake excitations is applied. In addition to the procedures in the frequency domain numerical representations of stochastic processes in time domain are explained.

The contents of the lecture are deepened during the exercises and through seminar papers performed by the students. The presentation of related results through students is part of the modul.

Learning objectives: The students shall attain the qualifications to apply realistic models of dynamically excited engineering structures and of the excitation mechanism including simplified, stochastic excitation models for wind or earthquake impacts, and to analyse the structural responses.

Proofs of academic achievement: Written examination (2 hours)

Student research projects (seminar papers) on vibration problems in structural engineering including modal analysis and stochastic dynamics)

Teacher/Lecturer: Prof. Dr.-Ing. R. Höffer, Prof. Dr. Tech. Meschke and assistants

Room: IA 6/21

Day: Wednesday / Thursday

Time: 8.30 – 10.00 / 14.15 – 15.45

Begin: 13/10/10

This course is especially suitable for exchange students.

This course is part of a module taught in entirely in English: Module “Dynamics of Structures”

COMPUTATIONAL PLASTICITY**Language:** English**Department:** Computational Engineering**Degree programme:** Master**Course type:** Lectures including exercises: 3h**Credit Points:** 4**Requirements:** A first degree in engineering sciences, e.g. B.Sc. Basic knowledge of continuum mechanics is required.**Course description:**

Introduction: Physical Motivation. Rate Independent Plasticity. Rate Dependence. Creep. Rheological Models.

1-D Mathematical Model: Yield Criterion. Flow Rule. Loading / Unloading Conditions. Isotropic and Kinematic Hardening Models.

Computational Aspects of 1-D Elasto-Plasticity: Integration Algorithms for 1-D Elasto-Plasticity. Operator Split. Return Mapping. Incremental Elasto-Plastic BVP. Consistent Tangent Modulus.

Classical Model of Elasto-Plasticity: Physical Motivation. Classical Mathematical Model of Rate-Independent. Elasto-Plasticity: Yield Criterion. Flow Rule. Loading / Unloading Conditions.

Computational Aspects of Elasto-Plasticity: Integration Algorithms for Elasto-Plasticity. Operator Split. The Trial Elastic State. Return Mapping. Incremental Elasto-Plastic BVP. Consistent Tangent Modulus.

Integration Algorithms for Generalized Elasto-Plasticity: Stress Integration Algorithm.

Computational Aspects of Large Strain Elasto-Plasticity: Multiplicative Elasto-Plastic Split. Yield Criterion. Flow Rule. Isotropic Hardening Operator Split. Return Mapping. Exponential Map. Incremental Elasto-Plastic BVP.

Learning objectives: Fundamentals of computational modeling of inelastic materials with emphasis on rate independent plasticity. A sound basis for approximation methods and finite element method.

Understanding of different methodologies for discretisation of time evolution problems, and rate independent elasto-plasticity in particular.

Proofs of academic achievement: Assessment: 60% by examination (open book exam), 40% by course work (three small projects that will require both hand calculation and computer simulation. Computer simulation will require a certain amount of programming).

Teacher/Lecturer: Dr.-Ing. Ulrich Hoppe**Room:** IA 3/21**Day:** Monday**Time:** 13.15 – 15.30**Begin:** 11/10/10**This course is especially suitable for exchange students.****This course is part of a module taught in entirely in English:** Module “Computational Plasticity”

DESIGN OPTIMIZATION**Language:** English**Department:** Computational Engineering**Degree programme:** Master**Course type:** Lecture (2h) and Exercise (2 h)**Credit Points:** 6**Requirements:** A first degree in engineering sciences, e.g. B.Sc.**Course description:**

Introduction: Definition of optimization problems, History of optimization

- Design as a process: Conventional design, Optimization as a design tool
- Optimization from a mathematical viewpoint: Numerical approaches, Linear optimization, Convex domains, partitioned domains, Examples
- Categories of opt. variables: Explicit design variables, Synthesis and analysis, Discrete and continuous variables, Shape variables
- Dependant design variables
- Realization of constraints: Explicit and implicit constraints, Constraint transformation, Equality constraints
- Optimization criterion: Objectives in structural engineering
- Application of design optimization in structural engineering: Trusses and beams, Framed structures, Plates and shells, Mixed structures
- Solution techniques: Direct and indirect methods, Gradients, Hessian matrix, Kuhn-Trucker conditions

Learning objectives: Acquirement of skills in design optimization to be able to model, solve and evaluate optimization problems for moderately complex technical systems. .

Proofs of academic achievement: Written examination (2 hours)**Teacher/Lecturer:** Prof. König, Dr. Lehner and assistants**Room:** IAN 00/18 / IA 5/56**Day:** Wednesday / Thursday**Time:** 12.00 – 13.30 / 08.30 – 10.00**Begin:** 13/10/10**This course is especially suitable for exchange students.****This course is part of a module taught in entirely in English:** Module “Design Optimization”

SAFETY AND RELIABILITY OF ENGINEERING STRUCTURES

Language: English

Department: Computational Engineering

Degree programme: Master

Course type: Lecture: 2 h , Exercise: 2 h, Project work: 1 h

Credit Points: 6

Requirements: A first degree in engineering sciences, e.g. B.Sc. Basic knowledge in structural engineering

Course description:

- Introduction - causes of failures
- Basic definitions - safety, reliability, probability, risk
- Basic demands for the design and appropriate target reliability values: Structural safety, Serviceability, Durability, Robustness
- Formulation of the basic design problem: $R > E$
- Descriptive statistics: position (mean value, median value), dispersion (range, standard deviation, variation coefficient), shape: (skewness, peakedness)
- Theoretical distributions: Discrete distributions (Bernoulli and Poisson Distribution), Continuous distributions (Rectangular, Triangular, Beta, Normal, Log-Normal, Exponential, Extreme Value Distributions)
- Failure probability and basic design concept
- Code concept - level 1 approach
- First Order Reliability Method (FORM) - level 2 approach
- Full reliability analysis - level 3 approach
- Probabilistic models for actions: dead load, imposed loads, snow and wind loads, combination of loads
- Probabilistic models for resistance: cross section - structure
- Further basic variables: geometry, model uncertainties
- Non-linear methods and Monte-Carlo Simulation
- Learning objectives: Students should attain the following qualifications / competencies:
- Basic knowledge on statistics and probability, deeper understanding of the basic principles of reliability analysis in structural engineering, basic knowledge on how codes try to meet the reliability demands in regard to structural safety and serviceability, basic knowledge in simulation techniques

Proofs of academic achievement: Successful project work on simulation techniques and Written examination (2 hours)

Teacher/Lecturer: PD Dr.-Ing. habil. Kasperski

Room: IA 4/56 / IA 3/56

Day: Monday / Thursday

Time: 09.30 – 11.00 / 10.15 – 11.45

Begin: 11/10/10

This course is especially suitable for exchange students.

This course is part of a module taught in entirely in English: Module “Safety and reliability of engineering structures”

INSTITUTE OF DEVELOPMENT RESEARCH AND DEVELOPMENT POLICY

www.rub.de/iee

Contact:

Meik Nowak, Course Coordinator

Tel: 0234/32-22458

Email: meik.nowak@rub.de

ECONOMIC TUTORIAL

Language: English

Department: Institute of Development Research and Development Policy

Degree programme: Master of Arts Development Management

Course type: Seminar

Credit Points: 0

Requirements: Admission to the MA in Development Management

Course description:

The course is especially targeted at non-economists and enables those students not familiar with economic theories and approaches with the necessary understanding to successfully participate in subsequent economics-oriented courses.

The course teaches the basic concepts and tools of economic analysis. The course will mainly focus on microeconomics, i.e. the analysis of economic problems from the perspective of the individual which fits well to the actors-oriented approach of the program. In addition some macroeconomic-basics are covered.

Proofs of academic achievement: Active Participation

Teacher/Lecturer: Dr. Gabriele Bäcker

Room: GB 1/144

Day: Monday - Friday

Time: 09.00 – 15.00

Begin: 22/11/10 – 26/11/10

This course is part of a module taught entirely in English: Module “Theories of Development and Underdevelopment”

THEORIES OF DEVELOPMENT AND UNDERDEVELOPMENT – ECONOMIC PERSPECTIVES**Language:** English**Department:** Institute of Development Research and Development Policy**Degree programme:** Master of Arts Development Management**Course type:** Lecture**Credit Points:** 6

Requirements: Admission to the MA in Development Management. Non-economists should have followed the Economic Tutorial. Students with an economic background should have made themselves familiar with the contents of that tutorial to find out if they have the required basic knowledge of economic thinking.

Course description:

The students are aware of the international differences in important development indicators, know about the goals of economically-oriented development policy, are aware about the variety and of the structure of theories trying to explain economic growth, know about the strengths and weaknesses of the different approaches and their relevance for development policy. The students are able to discuss on a theoretical base the advantages and disadvantages of different sectoral development policies, as well as of inward- and outward-looking approaches. They know about the chances and dangers of globalisation and of regional integration. Finally they have gained knowledge about the modes of trade and capital assistance, of programme and project aid, and are able to give a differentiated judgement of the achievements (and failures) of development policy.

Proofs of academic achievement: Written examination of two hours**Teacher/Lecturer:** Prof. Dr. Wilhelm Löwenstein**Room:** GB 1/144**Day:** Monday - Friday**Time:** 09.00 – 15.00**Begin:** 29/11/10 – 10/12/10

This course is part of a module taught entirely in English: Module “Theories of Development and Underdevelopment”

**THEORIES OF DEVELOPMENT AND UNDERDEVELOPMENT –
SOCIAL SCIENCES PERSPECTIVES****Language:** English**Department:** Institute of Development Research and Development Policy**Degree programme:** Master of Arts Development Management**Course type:** Seminar**Credit Points:** 6**Requirements:** Admission to the MA in Development Management**Course description:**

By the end of this course, students will have developed a comprehensive view of the ways in which contemporary thinking in social sciences has shaped our understanding of development and the theoretical underpinnings of conventional views of the reasons behind (under-) development. Another goal of the course is to encourage critical reading, thinking, writing, and speaking skills.

Proofs of academic achievement: Each student is required to write a 10 page assignment. Topics can be chosen from a list which will be made available at the beginning of the course. Guidelines for writing the assignments are to be considered.

Teacher/Lecturer: Dr. Meik Nowak**Room:** GB 1/144**Day:** Monday – Friday**Time:** 9.00 – 15.00**Begin:** 01/11/10 – 12/12/10

This course is part of a module taught entirely in English: Module “Theories of Development and Underdevelopment”

DEVELOPMENT COOPERATION: ACTORS & ROLES**Language:** English**Department:** Institute of Development Research and Development Policy**Degree programme:** Master of Arts Development Management**Course type:** Lecture**Credit Points:** 3**Requirements:** Admission to the MA Development Management**Course description:**

Students have gained an overview over relevant actors in the field of international development cooperation with a special focus on International Governmental Organisations (IGOs) and International Non-Governmental Organisations (INGOs). They know about distinguishing criteria of these actors, their formal structures, their 'modi operandi' as well as their development over time are considered with the help of real world examples.

Proofs of academic achievement: 2 hours written exam.**Teacher/Lecturer:** Prof. Dr. em. Uwe Andersen**Room:** GB 1/144**Day:** Monday - Friday**Time:** 09.00 – 15.00**Begin:** 13/12/10 – 17/12/10**This course is part of a module taught entirely in English:** Module "Actors in Development Cooperation"

DEVELOPMENT COOPERATION: PUBLIC SECTOR MANAGEMENT**Language:** English**Department:** Institute of Development Research and Development Policy (IEE)**Degree programme:** Master of Arts Development Management**Course type:** Seminar**Credit Points:** 3**Requirements:** Admission to the MA Development Management**Course description:**

The major aspects of public administration and the challenges the public sectors of developing countries are faced with are introduced to the students. They are enabled to take a comprehensive and interdisciplinary perspective on the complex facets of administration in developing countries.

Proofs of academic achievement: Oral Examination**Teacher/Lecturer:** Dr. Meik Nowak**Room:** GB 1/144**Day:** Monday – Friday**Time:** 09.00 – 15.00**Begin:** 11/10/10 – 15/10/10

This course is part of a module taught entirely in English: Module “Actors in Development Cooperation”

INSTITUTIONS & DEVELOPMENT**Language:** English**Department:** Institute of Development Research and Development Policy (IEE)**Degree programme:** Master of Arts Development Management**Course type:** Lecture**Credit Points:** 6**Requirements:** Admission to the MA in Development Management**Course description:**

Students are aware of the major institutional determinants of development and are enabled to conduct a systematic and theory guided analysis of institutional developmental issues with respect to foreign aid provision, SME development, environmental problems, and agricultural contracting, among others.

Proofs of academic achievement: Written Examination of two hours**Teacher/Lecturer:** Dr. Katja Bender**Room:** GB 1/144**Day:** Monday – Friday**Time:** 9.00 – 15.00**Begin:** 18/10/10 – 29/10/10

METHODS OF EMPIRICAL SOCIAL RESEARCH**Language:** English**Department:** Institute of Development Research and Development Policy (IEE)**Degree programme:** Master of Arts in Development Management**Course type:** Seminar; lecture with exercises; workshop**Credit Points:** 12**Requirements:** Admission to the MA in Development Management**Course description:**

Students have gained insights into inherent logic of theory-based empirical research and are able to use that knowledge for structuring their own research questions. They are familiar with basic statistical parameters, know how to interpret them and have developed a feeling for the limitations of these concepts. Furthermore students have gained an overview over the most common ways of data gathering – ranging from group or expert interviews over the use of questionnaires to the organisation of secondary data – and are able to choose those tools which are most appropriate for their own research.

Proofs of academic achievement: Regular short papers, written exam, group presentation and handout; see individualcourse descriptions for details. Module grade consists of average grade for shortpapers (2/3), grade for written exam (1/3) and grade for group presentation and handout (1/3).

Teacher/Lecturer: Prof. Dr. Werner Voß/ Dr. Katja Serova / Dr. Katja Bender / Jens Blank**Room:** GB 1/144 and Room 1H, SOG (external venue)**Day:** Monday – Friday**Time:** 09.00 – 16.00**Begin:** 14/09/10 – 24/09/10 and 10/01/11 – 21/01/11 (at the UWC in Cape Town)

FACULTY OF EAST ASIAN STUDIES

JAPANESE HISTORY

www.rub.de/gj

Contact:

Hans Martin Krämer

Tel: 0234/32-22314

Email: hans.martin.kraemer@rub.de

JAPANESE MYTHOLOGY: HERMENEUTICS ON SCRIPTURE

Language: English

Department: Japanese Studies/Religious Studies

Degree programme: B.A.

Course type: Seminar

Credit Points: 5/4

Requirements: either basic proficiency in Japanese or basic knowledge of religious studies

Course description:

It is well known Kiki, namely Kojiki and Nihonshoki, has been seen as the representative narrative of so called 'Japanese Mythology' to reflect mentality of Japanese ethnicity. Nowadays, however, obviously for Japanese the concept of mythology is the historical product imported from the Western discourse. When Japan entered into modern period, the history of Goddess was separated into two entities: one is the mythology as a fiction, another is the scientific history as a fact. From that time there have been wide range of arguments by now in Japan which part of Kiki is mythology or scientific history.

If the concept of mythology is the invented product of modernity, we should overcome this dichotomy of "mythology and scientific history" to comprehend Kiki as just a 'narrative' of their past to identify themselves with cultural origin. Especially after the 'linguistic turn' of humanities, the academic concern to analyze historical text is not what was originally written by the author but how its interpreters has interpreted the text after the establishment of text. This transition of the interpretational attitude makes the possible to bring into the study of Kiki the perspective of 'effecting history of interpretation' from antiquity to modern period which H.-G. Gadamer advocates in the discipline of hermeneutics.

On the other hand, the attempt to describe the history of interpretation tends to fail into the pitfall of historical relativism only to argue each period of history has own sense of values. It easily misleads us to lose the perspective to objectify the total vision on the history. To avoid this pitfall we should problematize the 'intentionness' to-ward the historical origin which has been our motivation to describe own history to transcend the difference between the historical periods. This critical attitude toward 'our' history makes us possible to dislocate performatively the narrative of the national history like pure Japaneseness. Such an act of dislocation can open up the possibility

to analyze the secret of the sacred aura emanated from the scripture of historical writing whose core is just our intentionness toward the historical origin.

There is a mandatory pre-registration for this class. If you want to participate, please be sure to write an e-mail to hans.martin.kraemer@rub.de until **3 October 2010**. Inquiries may also be directed to the same address.

Textbook:

Jun'ichi Isomae (2010) Japanese Mythology: Hermeneutics on Scripture, London & Oakville: Equinox Publishing.

Proofs of academic achievement: weekly summaries, written report

Teacher/Lecturer: Prof. Jun'ichi Isomae, Jun.prof. Dr. Hans Martin Krämer

Room: GB 03/46

Day: Wednesday

Time: 14.15 – 15.45

Begin: 13/10/2010

FACULTY OF ECONOMICS

www.wiwi.rub.de

Contact:

Prof. Dr. Jörg Schimmelpfennig

Tel: 0234/32-22468

Email: joerg.schimmelpfennig@rub.de

HEALTH ECONOMICS

Language: English

Department: Chair for Competition Theorie and Policy

Degree programme: Bachelor of Management and Economics

Course type: Lecture (2h) and Seminar

Credit Points: 10 ECTS

Requirements: Good Knowledge in econometrics and microeconomics

Course description:

The aim of Health Economics is to take the audience to the frontier of research in health economics and beyond, by providing them with short introductions to key topics. The lectures focus on specific concepts, methods and key evidence. In the seminar, students should learn to assess the recent health economic literature independently, following a specific topic.

Proofs of academic achievement: Written examination and seminar paper

Teacher/Lecturer: Prof. Dr. Haisken-DeNew

Room: HMA 30

Day: Tuesday

Time: 10.00 – 12.00

Begin: -

ECONOMETRIC EVALUATION OF ECONOMIC POLICIES**Language:** English**Department:** Chair for Applied Economic Research**Degree programme:** Master of Management and Economics / Master of Economics**Course type:** Lecture (1h) and Seminar (2h)**Credit Points:** 5 ECTS**Requirements:** Advanced knowledge in empirical economic research and/or econometrics**Course description:**

Tight public budgets increase the need to learn more about the effectiveness and efficiency of public policy measures. The empirical evaluation of these policies, however, is connected with difficult methodological problems. This module discusses the newest developments in the literature on the empirical evaluation of economic policy measures. A lecture introduces the basic concepts. Central contributions to the literature will be presented by the students themselves and discussed by the participants in a detailed way.

Proofs of academic achievement: Written examination (50%) and oral examination (50%)**Teacher/Lecturer:** Prof. Dr. Bauer**Room:** RWI Essen**Day:** Friday**Time:** 14.00 – 16.00**Begin:** 22/10/2010

AFRICAN ECONOMIC DEVELOPMENT**Language:** English**Department:** Chair for International Economics**Degree programme:** Master of Management and Economics / Master of Economics**Course type:** Lecture (2h) and Seminar (2h)**Credit Points:** 10 ECTS**Requirements:** Basic knowledge in development economics and econometrics**Course description:**

The aim of this course is to increase the capacity of students to use their knowledge of economic theory and development economics in rigorous analysis of a subset of the critical issues facing policy makers in sub-Saharan Africa. The focus is on sectoral and microeconomic as well as macroeconomic issues in Africa. "African Economic Development", consisting of a lecture and a seminar, intends to explain the reasons for the continued widespread poverty throughout the continent.

Proofs of academic achievement: Written examination 1/2, seminar paper 1/4 and oral examination 1/4**Teacher/Lecturer:** Prof. Dr. Busse**Room:** GC 03/46**Day:** Tuesday**Time:** 12.00 – 16.00**Begin:** 12/10/2010 – 30/11/2010

ADVANCED MACROECONOMICS**Language:** English**Department:** Chair for Macroeconomics**Degree programme:** Master of Management and Economics / Master of Economics**Course type:** Lecture (3h) and tutorial (3h)**Credit Points:** 10 ECTS**Requirements:** -**Course description:**

This module covers advanced theoretical models on business cycle fluctuations, inflation, unemployment, and economic growth. It provides an overview over the most important macroeconomic topics and introduces students to modern micro-founded macroeconomics. The focus of this module is on New Keynesian models.

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Prof. Dr. Roos**Room:** HGC 50; GC 03/42; GC 02/130**Day:** Monday, Tuesday, Thursday**Time:** 10.00 – 12.00; 8.00 – 10.00; 8.30 – 10.00**Begin:** ?

COST-BENEFIT ANALYSIS**Language:** English**Department:** Chair for Development Research**Degree programme:** Master of Management and Economics / Master of Economics**Course type:** Lecture (2h)**Credit Points:** 5 ECTS**Requirements:** Good knowledge of microeconomics and an interest in combining microeconomic theory with empirical research.**Course description:**

A change in the provision with public goods affects the wellbeing of people. And under which circumstances can these changes be measured in monetary terms? Which methods from the CBA-toolbox are available to capture the damages of an oil spill, the advantages of nature conservation, the effects of the construction of a dam, or the impact of being protected from natural hazard? These and related questions will be discussed within the module based on literature as well as in real-world case studies so that participants are made familiar with a variety of approaches that are suitable for the monetary evaluation of public interventions.

Proofs of academic achievement: Written exam (50%), case study (50%),**Teacher/Lecturer:** Prof. Dr. Wilhelm Löwenstein**Room:** GBCF 04/411**Day:** Thursday**Time:** 10.00 – 12.00**Begin:** ?

SEMINAR IN DEVELOPMENT ECONOMICS**Language:** english**Department:** Chair for International Economics**Degree programme:** Master of Management and Economics / Master of Economics**Course type:** Seminar (2h)**Credit Points:** 5 ECTS**Requirements:** Successful conclusion of the modul „Development Economics“ or of an equivalent modul; basic knowledge in econometrics**Course description:**

This seminar will deal with major issues in development economics. By enrolling in this seminar, students can broaden their theoretical and empirical knowledge in this field. The seminar intends to focus on particular aspects of development economics, such as the integration of developing countries into the world economy, poverty and health, governance and institutions, macroeconomic distortions, or civil war.

Proofs of academic achievement: Seminar paper (50%) and presentation (50%)**Teacher/Lecturer:** Prof. Dr. Busse**Room:** GC 03/46**Day:** Tuesday**Time:** 12.00 – 16.00**Begin:** 07/12/2010 – 01/02/2011

FACULTY OF GEOSCIENCE

INSTITUT FÜR GEOLOGIE, MINERALOGIE UND GEOPHYSIK

www.gmg.rub.de**Contact:**

Thomas Fockenberg

Tel: 0234/32- 24392

Email: thomas.fockenberg@rub.de**GROUNDWATER HYDRAULICS****Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 6**Requirements:** bachelor degree, basics in hydrogeology**Course description:**

basic groundwater hydraulics, small scale measurements (darcy test), large scale measurements (pumping test), analysis of hydraulic tests, characterization of heterogeneous aquifer systems

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Jun.Prof. Dr. Andreas Englert**Room:** NA 1/173**Day:** Monday / Friday**Time:** 8.30 – 10.00 / 10.15 – 11.45**Begin:** 11/10/2010

INORGANIC HYDROCHEMISTRY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 6**Requirements:** Knowledge about hydrogeology and basics in hydrochemistry (Hydrogeologische Methoden)**Course description:**

The course comprised hydrochemical reactions in aquifers like dissolution- precipitation, acid-base-reactions, redox-reactions, gas-water-reactions, complexformation and hydrochemical calculations. In the course the use of the computer code PHREEQC is explained and will be trained. Different applications in water technology and water treatment are described.

Proofs of academic achievement: Written examination and exercises**Teacher/Lecturer:** Prof. Dr. Frank Wisotzky**Room:** NA 1/173**Day:** Tuesday/Thursday**Time:** 10.15 – 11.45 / 12.15 – 13.45**Begin:** 12/10/2010

MICROFABRICS**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 4**Requirements:** B.Sc. in Geoscience, particularly skills in polarization microscopy, crystallography and petrology**Course description:**

The course deals with all aspects of microfabric evolution, crystallographic orientation, interfaces, crystal defects, deformation mechanisms, rheology of polycrystalline materials, with emphasis on the interpretation of the microstructural record of rocks.

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Prof. Dr. Bernhard Stöckhert**Room:** NA 04/597**Day:** Monday**Time:** 15.30 – 18.30**Begin:** 11/10/10

PETROLOGY OF IGNEOUS ROCKS**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture with practicals**Credit Points:** 6**Requirements:** Bachelor degree in geosciences, knowledge in microscopical determination of rock-forming minerals**Course description:**

Learning the tools used in Igneous Petrology. These include petrography, phase diagrams, textures, chemical data handling, trace elements, basic introduction to isotopes etc. Basic processes involved in melt generation and differentiation. Interpreting igneous rocks to infer their genetic histories (Examples from typical settings e.g. MORB, Magmatism at convergent boundaries, Granitoids). An important component of the interpretations will be to address the "source vs. process" question. Lectures will be accompanied by practicals using hand specimens and thin sections, as well as calculations using petrological and chemical data.

Proofs of academic achievement: written examination**Teacher/Lecturer:** Prof. Dr. Sumit Chakraborty**Room:** NA 04/693**Day:** Tuesday/Wednesday**Time:** 10.15 – 11.45 and 15.15 – 16.45 / 15.15 – 16.45**Begin:** 12/10/2010

EXCERCISES IN MICROFABRICS**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Practical course**Credit Points:** 3**Requirements:** B.Sc. in Geoscience and course "Microfabrics"**Course description:**

Application of the background acquired in the course "Microfabrics" to the interpretation of natural rocks (thin sections, polarizing microscopy); experiments with analogue materials.

Proofs of academic achievement: written examination (interpretation of rock microfabric)**Teacher/Lecturer:** Prof. Dr. Bernhard Stöckhert**Room:** NA 04/693**Day:** 5-day course**Time:** whole day**Begin:** please contact the lecturer

MARINE MICROPALIENTOLOGY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture and practical work**Credit Points:** 4**Requirements:** BSc in Geosciences, knowledge in Paleontology and stratigraphy**Course description:**

The course gives an overview of the various groups of microorganisms (dinoflagellates, calcareous nannofossils, diatoms, foraminifera, radiolarians, ostracods) widely used in marine geology, oceanography, ecology and oil geology. Each group will be addressed with respect to its taxonomy, ecology and paleoceanography. Special emphasis is being paid to the stratigraphic applications of these groups. Half of the time is devoted to practical exercises studying the groups under the microscope.

Proofs of academic achievement: written examination**Teacher/Lecturer:** Prof. Dr. Jörg Mutterlose**Room:** NA 04/597**Day:** Thursday**Time:** 10.15 - 12.45**Begin:** 14/10/10

SEDIMENTARY SYSTEMS; PART 1**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysic**Degree programme:** Master**Course type:** Lecture**Credit Points:** 3**Requirements:** MSc in Earth Sciences or similar background**Course description:**

This M.Sc. course deals with large-scale sedimentary systems in all its aspects. The focus is presently on carbonate factories in tropical, coolwater and mound facies. The aim is to provide students with a general understanding of processes that shape carbonate depositional environments throughout Earth history. Here we deal with topics such as platform geometries, controlling factors of carbonate deposition, carbonate sequence stratigraphy, applied carbonate sedimentology, carbonate geochemistry, paleoceanography of carbonate systems. The students contribute actively to the teaching and read and discuss papers. The course material is available on Blackboard.

Proofs of academic achievement: Oral presentation and written examination**Teacher/Lecturer:** Prof. Dr. Adrian Immenhauser**Room:** NA 04/597**Day:** Thursday**Time:** 13.00 – 14.00**Begin:** 14/10/2010

ISOTOPE GEOCHEMISTRY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** master**Course type:** lecture with exercises**Credit Points:** 7**Requirements:** Generally B.Sc. in Geosciences or a related discipline.**Course description:**

Stable isotopes represent important tools to investigate the processes and factors which control climate and biogeochemical cycling today as well as in the distant past. The aim of this M.Sc. course is to provide an overview on the most common geochemical indicators currently in use for the reconstruction of past environmental conditions (e.g. ocean temperatures, circulation, ecosystem productivity, atmospheric pCO₂) and of biogeochemical cycling. Following a short introduction on stable isotopes and up-to-date analytical techniques, the operation mode of the major biogeochemical cycles (C, N, S, H) and their inter-action with the hydrosphere, atmosphere, bio- and lithosphere will be discussed.

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Jun.Prof. Ulrich Heimhofer/Dr. Dieter Buhl**Room:** NA 04/592**Day:** Thursday/Friday**Time:** 14.00 – 15.30**Begin:** 14/10/2010

ANALYSIS AND INTERPRETATION (INVERSE PROBLEMS)**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 5**Requirements:** Generally B.Sc. in Geosciences or a related discipline. Specially. Candidates are required to contact the lecturer (wolfgang.friederich@rub.de) prior to admission to this course.**Course description:**

Students learn general techniques of deriving earth models from observed data by solving an optimization problem with emphasis on inverse problems with inconsistent, erroneous and incomplete data

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Prof. Dr. Wolfgang Friederich**Room:** please contact the lecturer**Day:** please contact the lecturer**Time:** please contact the lecturer**Begin:** please contact the lecturer**This course is especially suitable for exchange students.**

THEORETICAL GEOPHYSICS II (FLUIDDYNAMICS)**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 4**Requirements:** none**Course description:**

Introduction (Framework and continuum's hypothesis); Mathematical tools (properties of tensors, differentiation and integration of scalar and vectorial fields); Kinematics (Euler- and Lagrange-description, material derivative, Helmholtz theorem, velocitygradient matrix, strain rate tensor); Conservation laws (Reynolds transport Theorem, mass conservations and continuity equation, conservation of momentum and Cauchy stress and equation of motion, energy conservation); Equations of state, material equations (viscosity, flow laws); Navier-Stokes equations; Potential flow; Some applications (water waves and Tsunamis, melt segregation, etc.)

Proofs of academic achievement: Written examination (+ weekly assignments)**Teacher/Lecturer:** Prof. Dr. Jörg Renner**Room** to be announced (schedule meeting: Monday, October 11th, 2010, 9 am)**Day:** to be announced**Time:** to be announced**Begin:** to be announced

SEMINAR PETROLOGY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Seminar**Credit Points:** 2**Requirements:** Bachelor degree in geosciences**Course description:**

Case studies of petrological problems presented by the participants

Proofs of academic achievement: Oral presentation**Teacher/Lecturer:** Prof. Dr. Sumit Chakraborty/ Jun.-Prof. Dr. Thomas Müller**Room:** NA 04/693**Day:** Tuesday**Time:** 17.00 – 18.00**Begin:** 12/10/2010

SEMINAR MAGMATISM**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Seminary**Credit Points:** 1**Requirements:** B.Sc. in Geoscience, Course "Magmatism" followed simultaneously**Course description:**

Case studies of active volcanos and specific magmatic processes presented by the participants

Proofs of academic achievement: Oral presentation, file made available to the participants**Teacher/Lecturer:** Prof. Dr. Bernhard Stöckhert**Room:** please contact the lecturer**Day:** please contact the lecturer**Time:** please contact the lecturer**Begin:** please contact the lecturer

GEODYNAMICS I**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 5**Requirements:** none**Course description:**

Equations of state for minerals at temperatures and pressures prevailing in the Earth's interior; defects in crystals (point, linear, planar): their geometrical characteristics and kinetics; deformation mechanisms at high homologous temperatures (dislocation and diffusion creep); melt migration

Aim: Familiarize with theoretical concepts of solid state physics and thermodynamics; students are supposed to learn how to tackle problems in geodynamics with continuum mechanics and micromechanics.

Proofs of academic achievement: Written examination (+ weekly assignments)**Teacher/Lecturer:** Prof. Dr. Jörg Renner**Room:** to be announced (schedule meeting: Monday, October 11th 2010, 9 am)**Day:** -**Time:** -**Begin:** -

EXPLORATION GEOPHYSICS II**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 5**Requirements:** none**Course description:**

1) Introduction into origin of hydrocarbons; 2) Physical properties of hydrocarbons; 3) Basics of poro-elasticity; 4) Hydraulic borehole testing (theory and practice); 5) Geothermal energy provision; 6) Particular seismic waves (guided waves in fluid-saturated media)

Aim: Students are supposed to learn the basics of procedures often used in exploration beyond the seismic methods taught in "Exploration geophysics I"; besides practical aspects the theoretical description (differential equations) and solving strategies are presented.

Proofs of academic achievement: (Oral examination/written examination/...) written examination (+weekly assignments)

Teacher/Lecturer: Prof. Dr. Jörg Renner**Room:** to be announced (schedule meeting: Monday, October 11th 2010, 9 am)**Day:** -**Time:** -**Begin:** -

PETROLEUM GEOLOGY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 1**Requirements:** -**Course description:**

-

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Dr. Franz Nieberding**Room:** please contact the lecturer**Day:** 5-day course**Time:** whole day**Begin:** please contact the lecturer

BIOMINERALISATION**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 3**Requirements:** -**Course description:**

-

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Prof. Dr. Adrian Immenhauser**Room:** NA 04/597**Day:** Wednesday**Time:** 9.00 – 10.00**Begin:** 13/10/2010

PROJECT IN IGNEOUS PETROLOGY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Seminar**Credit Points:** 4**Requirements:** Bachelor degree in geosciences**Course description:**

This will involved the detailed study of one coherent suite of rocks from a given setting. This course uses the tools learned in petrology of igneous rocks and can be considered to be an advanced handling of the former. The study will involve reading and critically analyzing the relevant literature, studying the rocks in hand specimen and thin sections, and calculations using chemical data from these rocks. The goal is to understand the development of a model for the origin of the rocks using data of different kinds. The rock suites may come from the petrological sample collection or from various field trips of the students / teachers.

Proofs of academic achievement: Thesis**Teacher/Lecturer:** Prof. Dr. Sumit Chakraborty**Room:** please contact the lecturer**Day:** please contact the lecturer**Time:** please contact the lecturer**Begin:** please contact the lecturer

ANALYTICAL METHODS**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Lecture**Credit Points:** 2**Requirements:** Bachelor degree in geosciences, fundamental knowledge in chemistry**Course description:**

This is a required course at the beginning of the petrological curriculum at the Masters level. The objective of the course is to introduce the students to the variety of analytical tools that are available to the modern petrologist / geochemist. For each method discussed, the basic physical principle of the analysis, the capabilities (e.g. major / trace elements, detection limits, kinds of elements analyzed etc.) and typical applications will be introduced. The ultimate objective is to provide an overview which will help subsequently to appreciate the literature better and to plan the Masters Thesis properly.

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Prof. Dr. Sumit Chakraborty / Dr. Thomas Fockenberg**Room:** please contact the lecturer**Day:** please contact the lecturer**Time:** please contact the lecturer**Begin:** please contact the lecturer

PRACTICAL SILICATE ROCK ANALYSIS**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Practical work**Credit Points:** 4**Requirements:** Course analytical methods**Course description:**

Whole rock analysis using spectroscopic methods (AAS, ICP-AES, XRF), coulometric methods (Karl-Fischer titration of water), potentiometric methods (Determination of FeO) and quantification of CO₂. The data will be used for the interpretation of the rock genesis with geochemical computer programs.

Proofs of academic achievement: Thesis**Teacher/Lecturer:** Dr. Thomas Fockenberg**Room:** NA 04/656**Day:** 5 day course in March 2011**Time:** whole day**Begin:** to be announced

RECENT DEVELOPMENTS IN ANALYTICAL AND EXPERIMENTAL PETROLOGY**Language:** English**Department:** Institute for Geology, Mineralogy and Geophysics**Degree programme:** Master**Course type:** Seminar**Credit Points:** 4**Requirements:** Bachelor degree in geosciences**Course description:**

Study, with the help of advisors, of a series of papers on one topic/a set of topics over the course of the semester. The papers may focus on analytical techniques, or studies on experimental petrology. These would typically trace the evolution of a given kind of method with time, focusing on new advantages that were gained as the tools evolved.

Proofs of academic achievement: The grade would be based on a paper that the students submit before the end of the semester. The format would be that of a research proposal where a problem of the student's choice is to be studied using the analytical/experimental method chosen. The student will have to justify why this method is preferred over other possible alternatives.

Teacher/Lecturer: Prof. Dr. Sumit Chakraborty / Prof. Dr. Thomas Müller / Dr. Ralf Dohmen / Dr. Thomas Fockenberg

Room: please contact the lecturer

Day: please contact the lecturer

Time: please contact the lecturer

Begin: please contact the lecturer

INTERDISCIPLINARY CENTRE OF ADVANCED MATERIALS SIMULATION

www.icams.de

Contact:

Rebecca Janisch

Tel: 0234/32- 29304

Email: rebecca.janisch@rub.de

ASSESSMENT AND DESCRIPTION OF MECHANICAL PROPERTIES OF SOLIDS

Language: English

Department: ICAMS, Department Micromechanical and Macroscopic Modeling

Degree programme: -

Course type: Lecture plus seminar (on appointment)

Credit Points: 4.5

Requirements: basic knowledge in solid state physics and crystallography

Course description:

This course is directed to students of physics or chemistry who are interested in the relationship between the microscopic structure of real materials and the macroscopic (mechanical) material properties. Students will receive an overview over defects (vacancies, dislocations, interfaces) in solids and learn about their importance for mechanical properties of materials. The mechanisms of basic mechanical properties like deformability and strength will be de-scribed, as well as by which quantities these properties are characterised, and how these quantities can be quantitatively assessed by experiments or simulations. We will also discuss the metallurgical and physical origin of these properties of these features, to lay the foundation for materials design or to solve engineering problems.

Contents:

- review of elastic properties of solids
- overview over defects in solids
- concepts of mechanical properties of materials (stress-strain curves, stiffness, strength, ductility)
- origin of plastic deformation and fracture
- relation between microstructure and mechanical properties
- strengthening concepts for engineering materials
- assessment methods for mechanical properties (mechanical testing)

Proofs of academic achievement: Oral examination

Teacher/Lecturer: Dr. Rebecca Janisch

Room: NB 02/99

Day: Thursday

Time: 10:15- 11:45

Begin: 14/10/2010

FACULTY OF LAW

www.jura.rub.de

Contact:

Katrin Giesen

Tel: 0234/32-27681

Email: katrin.giesen@rub.de

INTRODUCTION AU DROIT PRIVÉ FRANÇAIS

Language: French

Department: The Dean of the Faculty of Law

Degree programme: Bachelor/Master

Course type: Lecture

Credit Points: 3

Requirements: French language proficiency

Course description:

This intensive unit introduces students to French Private Law and provides them with the French Legal terminology. In particular, it covers the history of French Civil Law and the law of obligations.

Proofs of academic achievement: Written exam in French

Teacher/Lecturer: Dr. Henri Courivaud

Room: GC7/131

Day: 04/10/10 - 08/10/10, Monday - Friday

Time: 10.00 – 15.15

Begin: 04/10/2010

This course is especially suitable for exchange students.

INTRODUCTION O TURKISH LAW OF EVIDENCE**Language:** Turkish**Department:** The Dean of the Faculty of Law**Degree programme:** Bachelor/Master**Course type:** Lecture**Credit Points:** 3**Requirements:** good Turkish and German skills**Course description:**

This intensive unit gives students an introduction to Turkish law, in particular the development of the Turkish law, introduction to procedure and enforcement of judgements, law of evidence, and injunctions.

Proofs of academic achievement: Written exam in Turkish**Teacher/Lecturer:** Frau Prof. Nevhis Deren-Yildirim, Universität Istanbul**Room:** GC 6/131**Day:** 04/10/2010 to 08/10/2010, Monday to Friday**Time:** 09.00 – 13.15**Begin:** 04/10/2010**This course is especially suitable for exchange students.**

PLAIN ENGLISH FOR LAWYERS**Language:** English**Department:** Dean of the Faculty of Law**Degree programme:** Bachelor/Master**Course type:** Lecture/workshop**Credit Points:** 3**Requirements:** good English**Course description:**

It is the main objective of the course to improve the written and oral English skills of students. During the course, students will learn how to express themselves in plain English language. The course will include drafting exercises (letter of advice to client, legal research memorandum to partner) and the improvement of oral skills (presentation skills, client interview and negotiation, introduction to mooting). The course will be taught by providing theoretical knowledge, and then practicing the acquired skills by way of drafting and oral presentations and discussions.

Proofs of academic achievement: a choice of client letter, research memorandum, oral presentation

Teacher/Lecturer: Katrin Giesen, LL.B (Murdoch University, Perth)

Room: GC 7/131

Day: Wednesday

Time: 12.00 – 14.00

Begin: 20/10/2010

This course is especially suitable for exchange students.

PLAIN ENGLISH FOR LAWYERS (2)**Language:** English**Department:** Dean of the Faculty of Law**Degree programme:** Bachelor/Master**Course type:** Lecture/workshop**Credit Points:** 3**Requirements:** good English**Course description:**

It is the main objective of the course to improve the written and oral English skills of students. During the course, students will learn how to express themselves in plain English language. The course will include drafting exercises (letter of advice to client, legal research memorandum to partner) and the improvement of oral skills (presentation skills, client interview and negotiation, introduction to mooting). The course will be taught by providing theoretical knowledge, and then practicing the acquired skills by way of drafting and oral presentations and discussions.

Proofs of academic achievement: a choice of client letter, research memorandum, oral presentation**Teacher/Lecturer:** Katrin Giesen, LL.B (Murdoch University, Perth)**Room:** GC 7/131**Day:** Thursday**Time:** 10.00 – 12.00**Begin:** 21/10/2010**This course is especially suitable for exchange students.**

INTRODUCCIÓN AL DERECHO ESPAÑOL (INTRODUCTION TO SPANISH LAW)**Language:** Spanish**Department:** Dean of the Faculty of Law**Degree programme:** Bachelor/Master**Course type:** Lecture**Credit Points:** 3**Requirements:** Good Spanish**Course description:**

This intensive unit provides students with an overview of the Spanish Law, including administrative law, private law, and criminal law. It is particularly useful for students who intend to do further studies in Spain, or students wanting to practice in the area of international and comparative law, or simply wanting to experience in important European culture. The course includes an introduction to the distribution of power, the sources of law, law of obligations and family law, law of succession, and criminal law.

Proofs of academic achievement: written exam**Teacher/Lecturer:** Prof. Dr. Benito Alaez, Prof. Dr. Angel Espiniella, Profa. Dra. Marta González, University of Oviedo**Room:** GC 3/142**Day:** intensive unit over 3 weeks from 30/11/10 to 19/12/10**Time:** Public law (10h):

30.11. - 02.12.: 8.15-9.00

03.12.: 12.15-13.45 / 14.00-15.30

04.12.: 9.15-10.45 / 11.00-11.45

Private Law (10h):

10.12.: 12.15-13.45 / 14.15-15.45/ 16.00-16.45

11.12.: 9.15-10.45/ 11.15-12.45/ 13.00-13.45

Criminal Law (8h):

14.12.-16.12: 8.15-9.00

17.12.: 12.15-13.45 / 14.15-15.45 / 16.00-16.45 (5)

Begin: 30/10/2010**This course is especially suitable for exchange students.**

INTRODUCTION TO COMMON LAW FOR CIVIL LAWYERS**Language:** English**Department:** Dean of the Faculty of Law**Degree programme:** Bachelor/Master**Course type:** Lecture/workshop**Credit Points:** 3**Requirements:** Good English**Course description:**

It is the main objective of the course to provide students with an overview of those areas of common law which they are most likely to encounter in private practice. They will be familiarised with the terminology and doctrines of tort law and contract law, and encouraged to apply knowledge to factual situations.

Proofs of academic achievement: Written exam and written essay**Teacher/Lecturer:** Katrin Giesen, LL.B (Murdoch University, Perth)**Room:** to be announced**Day:** Intensive unit in lecture-free period in February 2011**Time:** to be announced**Begin:** to be announced**This course is especially suitable for exchange students.**

INTERNATIONAL COMMERCIAL LITIGATION**Language:** English**Department:** Chair of Civil Law, German and International Economic Law, esp. IT Law**Degree programme:** -**Course type:** Lecture**Credit Points:** -**Requirements:** none**Course description:**

The purpose of this interactive course is to examine the law and practice of commercial cross-border disputes. The course is conducted in the English language and contains both theoretical and practical elements such as mock cases.

The course is taught by Rechtsanwalt Dr. Roman Mallmann, who is a principal associate with the dispute resolution practice group of Freshfields Bruckhaus Deringer in Cologne.

The course is addressed to both undergraduate students from approx. 5th semester and postgraduates of the faculty. Since active participation is strongly encouraged, the attendance is generally limited to 30 participants.

To apply for the course, please contact Natallia Karniyevich personally at the Chair of Prof. Dr. Borges, GC 7/144, or via e-mail, at natallia.karniyevich[at]rub.de.

Proofs of academic achievement: Written examination and/or oral examination**Teacher/Lecturer:** Dr. Roman A. Mallmann**Room:** GC 03/49**Day:** Monday 18/10, 8/11, 22/11, 6/12, 20/12/10; 10/1, 24/1, 7/2/11**Time:** 9.15 – 11.45**Begin:** 18/10/10

INSTITUT FÜR NEUROINFORMATIK

www.neuroinformatik.rub.de

Contact:

Kathleen Schmidt

Tel: 0234/32- 28998

Email: Kathleen.Schmidt@INI.rub.de

MACHINE LEARNING: BASIC COURSE

Language: English

Department: Institut für Neuroinformatik

Degree programme: Master

Course type: Lecture and Tutorial

Credit Points: 2 (Lecture), 4 (Tutorial)

Requirements: Good command of linear algebra and calculus.

Course description:

This course covers a variety of methods from machine learning such as principal component analysis, clustering, vector quantization, self-organizing maps, independent component analysis, Bayesian theory and graphical models, linear regression, backpropagation of error, generalization and support vector machines.

Proofs of academic achievement: Written examination

Teacher/Lecturer: Prof. Dr. Laurenz Wiskott

Room: ND 6/99 (Lecture), ND 04/172 (Tutorial)

Day: Tuesday

Time: 12.30 – 14.00 (Lecture), 10.15 – 11.45 (Tutorial)

Begin: 12/10/2010 (Lecture), 19/10/2010 (Tutorial)

FACULTY OF MATHEMATICS

www.rub.de/ffm

Contact:

Dr. Eva Glasmachers

Tel: 0234/32-23780

Email: mathe-dekanat@rub.de

125 500 MATHEMATICS – MATHEMATICAL ASPECTS OF DIFFERENTIAL EQUATIONS AND NUMERICAL MATHEMATICS

Language: English

Department: Faculty of Mathematics

Degree programme: Master

Course type: -

Credit Points: -

Requirements: -

Course description:

-

Proofs of academic achievement: -

Teacher/Lecturer: Prof. Dr. Gerhard Röhrle

Room: NC 6/99 (Wednesday) and NB 6/99 (Thursday)

Day: Wednesday and Thursday

Time: 11.00 – 13.00

Begin: 13/10/2010

127 507 ADAPTIVE FINITE ELEMENT METHODS**Language:** English**Department:** Faculty of Mathematics**Degree programme:** Master**Course type:** -**Credit Points:** -**Requirements:** -**Course description:**

-

Proofs of academic achievement: -**Teacher/Lecturer:** Prof. Dr. Rüdiger Verfürth**Room:** ND 03/99 (Monday) and NA 2/99 (Wednesday)**Day:** Monday and Wednesday**Time:** 11.00 – 13.00 (Monday) and 15.00-17.00 (Wednesday)**Begin:** 11/10/2010

FACULTY OF PHILOLOGY

ENGLISH DEPARTMENT

www.rub.de/anglistik

Contact:

Raphael Fecke

Tel: 0234/32-22589

Email: es-auslandsaufenthalt@rub.de

Apart from a few exceptions all courses offered by the English Department are taught in English.

The different courses cover topics in the field of **American Cultural Studies**, **British Cultural Studies**, **American Literature**, **British Literature** and **Linguistics**.

Topics which could be particularly useful and interesting for exchange students are provided in courses of the modules **Language Practice** (i.e. Translation, Communication, Grammar) and **English for Special Purposes** (i.e. Legal English or Business English).

A complete list can be found in the departmental university calendar:

http://www.ruhr-uni-bochum.de/anglistik/courses/index_courses.htm

Contact Information:

Geschäftszimmer: GB 6/133

Mon – Fri: 9 a.m. - 13 p.m.

Tel: 0234/ 32- 22589

Email: anglistik@es.rub.de

FACULTY OF PHILOLOGY

INSTITUTE FOR MEDIA STUDIES

www.rub.de/ifm**Contact:**

Angela Schröder

Tel: 0234/32-27213

Email: sokrates-ifm@rub.de**VISUAL COMMUNICATION AND MEDIA THEORY. FROM PHOTOGRAPHIC AUTHENTICITY TO CONSTRUCTIVISM****Language:** English**Department:** Institute for Media Studies/ Exchange Coordination**Degree programme:** Bachelor**Course type:** .Seminar. This Seminar is offered especially for exchange students.**Credit Points:** -**Requirements:** -**Course description:**

Photo-theories as a starting point will serve for a closer view on dif. Media-theories which by special attention will be given to selfrefential models concerning the observer and the relevance of modes of visual communication in digital environment. Based on this, constructivist media theory will be discussed in search for a more elaborate model of understanding the everyday construction of media reality.

Proofs of academic achievement: paper/ presentation**Teacher/Lecturer:** Angela Schröder**Room:** GA 1/153**Day:** Wednesday**Time:** 12.00 – 14.00**Begin:** 20/10/2010**This course is especially suitable for exchange students.**

FACULTY OF PHILOSOPHY AND EDUCATION

INSTITUTE OF PHILOSOPHY

www.rub.de/philosophy**Contact:**

Prof. Dr. Albert Newen

Tel: 0234/32-22139/-24734

Email: albert.newen@rub.de**COLLOQUIUM****Language:** English**Department:** Institut für Philosophie, Arbeitsbereich Philosophie des Geistes**Degree programme:** Master of Arts/Master of Education**Course type:** Colloquium**Credit Points:** 6

Requirements: PhD-Students who are interested in presentation should write an email to both organizers (albert.newen@rub.de and markus.werning@rub.de) and come to the first meeting at the 14/10/2010. The program of the semester will be fixed then. PhD-students can receive 2 credit points for an active participation. M.A.-students can receive 4 credit points for a presentation in the colloquium (in the case of an additional essay, M.A.-students can receive 6 credit points).

Course description: The colloquium will offer regular presentations half from M.A. or PhD-students from Bochum and half from external guests. The presentations will all be in the general domain of theoretical philosophy and cognitive sciences. The presentations should ideally but not necessarily have some interdisciplinary dimensions such that perspectives from philosophy, psychology, linguistics and neurosciences can be systematically interconnected. The aim of the colloquium is to offer a platform for discussions of ongoing research and to support the education of students at the Master and PhD-level. Students who are accepted for a presentation in this seminar will receive a special training in preparing presentations in English.

Proofs of academic achievement: -**Teacher/Lecturer:** Prof. Dr. Albert Newen/Prof. Dr. Markus Werning**Room:** GABF 04/716**Day:** Thursday**Time:** 16.00 – 18.00 Uhr**Begin:** 14/10/2010**This course is especially suitable for exchange students.**

INTRODUCTION TO THE ANALYTIC PHILOSOPHY OF MIND**Language:** English**Department:** Institute of Philosophy II**Degree programme:** B.A.**Course type:** Seminar**Credit Points:** 4**Requirements:** general requirements for B.A. (vgl. GPO § 4), it is open for students from psychology or neuroscience**Course description:**

The main questions of this introductory course will be: What's the mark of the mental? What is the relation between mind and body? What is it for a mental state to be conscious?

Following these questions we will introduce some of the central concepts and positions of the philosophy of mind concerning intentionality, consciousness and mental causation. The course is directed to students who wish to acquire basic knowledge in this domain which is one of the most important fields of contemporary philosophy.

We will read and discuss classic papers which present and discuss central positions on the topics listed above and we will confront them (if possible) with more recent approaches. The course and the texts will be in English but questions and discussions can be held in German as well.

Einführunde Literatur / Introductory literature:

Beckermann, Ansgar (1999): Analytische Einführung in die Philosophie des Geistes. Berlin, New York: de Gruyter.

Kim, Jaegwon (2006): Philosophy of Mind. Westview Press, 2. Ed.

Dt. Übersetzung: Kim, Jaegwon (1998). Philosophie des Geistes. New York. Wien, New York: Springer.

Proofs of academic achievement: Written examination**Teacher/Lecturer:** Santiago Arango, Anne-Sophie Brüggem**Room:** GA 03/46**Day:** Friday**Time:** 12.00 – 14.00**Begin:** 15/10/2010**This course is especially suitable for exchange students.**

PHILOSOPHY AND THE COGNITIVE SCIENCES RECENT DEBATES AND LEARNING TO MAKE A PRESENTATION IN ENGLISH**Language:** English**Department:** Institute of Philosophy II**Degree programme:** M.A.**Course type:** Seminar/ colloquium**Credit Points:** 6**Requirements:** M.A. or PhD student or external guest**Course description:**

The colloquium will offer regular presentations half from M.A. or PhD-students from Bochum and half from external guests. The presentations will all be in the general domain of theoretical philosophy and cognitive sciences. The presentations should ideally but not necessarily have some interdisciplinary dimension such that perspectives from philosophy, psychology, linguistics and neurosciences can be systematically interconnected. The aim of the colloquium is to offer a platform for discussion of ongoing research and to support the education of students at the Master and PhD-level. Students who are accepted for a presentation in this seminar will receive a special training in preparing presentations in English.

Language: The presentations in the colloquium and the discussion will be in English. Questions can be raised in German but will then be translated for the whole audience.

Registration: PhD-students who are interested in presentations should write an email to both organizers (albert.newen@rub.de and Markus.Werning@rub.de) and come to the first meeting at the 14.10.2010. The program of the semester will be fixed then.

PhD-students can receive 2 credit points for an active participation. M.A.-students can receive 4 CP for a presentation in the colloquium (in the case of an additional essay, M.A. students can receive 6 CP).

Proofs of academic achievement: active participation, presentation and/or essay**Teacher/Lecturer:** Prof. Dr. Albert Newen, Prof. Dr. Markus Werning**Room:** GABF 04/716**Day:** Thursday**Time:** 16.00 – 18.00**Begin:** 14/10/2010

INTENTIONALITY, PERCEPTION AND COGNITION**Language:** English**Department:** Institut für Philosophie II**Degree programme:** B.A. or M.A. or PhD-students**Course type:** Advanced Lecture realized as a one-week-seminar with preparation meetings (research oriented)**Credit Points:** 4 for B.A.; 6 for M.A.; 2 for PhD

Requirements: Fluent English; B.A. students should have completed at least 60 CP in philosophy; M.A. students and PhD students are welcome. The participation includes two introductions. Formal introduction: Wednesday, 9.2. 16.15-17 Uhr in GA 3/143; Introduction of the content: Thursday, 10.3. 10-12 Uhr GA 3/143 (presupposing some reading)

Course description:

During this week (14.-18.3.2011) we will have lectures from different international experts with extended time for discussion concerning the following topics and questions: Intentionality: What is an adequate characterization of intentionality? How is this cognitive ability related to linguistic competence and behavioral abilities? Perception: Perceiving objects and misperceiving them is closely interconnected. How can we analyze misperceptions, optical illusions etc.? Do we need "qualia" to account for our phenomenal experiences? Cognition: To which extent do animals possess mental phenomena? How should we evaluate complex machines: Do complex machines have moral responsibility?

Proofs of academic achievement: -**Teacher/Lecturer:** Prof. Dr. Albert Newen (additional lecturers will be Prof. Tim Crane, Cambridge; Prof. Katalin Farkas, CEU Budapest; Prof. Colin Allen, Bloomington)**Room:** will be announced later**Day:** March 14th – 18th 2011; the whole days during the workshop week**Time:** 10.00 – 18.00 each day**Begin:** Formal introduction: Wednesday, 9.2. 16.15 – 17.00 in GA 3/143; Introduction of the content: Thursday, 10.3. 10.00 – 12.00 in GA 3/143 (presupposing some reading)**This course is especially suitable for exchange students.**

FACULTY OF PHILOSOPHY AND EDUCATION

INSTITUTE OF EDUCATIONAL SCIENCE

www.ife.rub.de**Contact:**

Dr. Ute Lange

Tel: 0234/32-24982

Email: ute.lange@rub.de**EDUCATIONAL DEVELOPMENTS IN COMPARATIVE PERSPECTIVES****Language:** English**Department:** Comparative Education**Degree programme:** Bachelor of Arts/Master of Education**Course type:** Seminar**Credit Points:** 4**Requirements:** Basic knowledge in Educational Sciences**Course description:**

Comparing education in various countries or regions basically implies the search for differences or similarities, e. g. in the structure of national education systems. In the first part of the course examples of different approaches will be presented, such as single-country studies, comparisons of two countries, regional approaches, comparisons by economic level, etc. In the second part of the course, some recent global developments in education will be looked at, such as gender and education, literacy rates, early childhood education, education in post-conflict situations, quality of education, etc. References will be made to the Global Monitoring Reports, issued by UNESCO on a yearly basis since 2002.

Proofs of academic achievement: Active participation, oral and written contributions according to the course plan and a reader which will be distributed in the first session.

Teacher/Lecturer: Prof. Dr. Christel Adick**Room:** GABF 04/358**Day:** Monday**Time:** 14.15 – 15.45**Begin:** 11/10/2010

FACULTY OF PHYSICS AND ASTRONOMY

www.physik.rub.de

Contact:

Anke Pappert

Tel: 0234/32-23445

Email: dekanat@physik.rub.de

The Faculty of Physics and Astronomy offers a broad range of courses in English. Detailed information can be found at www.physik.rub.de/studium/vorlesungsverzeichnis. Please have a look at the notice board at NB 02 Nord for changes and dates.

Courses start at the next possible date after lectures start in winter semester (11/10/2010).

Details concerning exercises will be fixed during the corresponding lectures.

MASTER OF SCIENCE / DIPLOM

Course Nr	Course Title	Day, Time	Room	Language	Lecturer	Comment
160 234	Computational Physics II	Mo 16.00-18.00	NB 5/99	English	Eliasson	Credits: 5
160 235	Exercise Computational Physics II	Tue. 16.00-18.00,	NB 7/173	English	Eliasson	

Solid state physics

Course Nr	Course Title	Day, Time	Room	Language	Lecturer	Comment
160 307	Einführung in die Nanotechnologie	2st.		English	Theis-Bröhl	Blockveranstaltung Februar/März 2011
160 308	Übungen zur Einführung in die Nanotechnologie	2st.		English	Theis-Bröhl	Blockveranstaltung Februar/März 2011
160 309	Programming Concepts in Materials Science	2st.		English	Madsen, Ma	The lecture is part of the Master Course in Materials Science offered by ICAMS
	<p>Learning Outcomes: Successful participants will gain an overview of modern programming methods, tools and software used for simulations in materials science. They can write simple codes or data analysis tools in Matlab and C++ on their own.</p> <p>Subject aims: Introduction to operating systems (Linux and Unix); Introduction to script languages (Python); Introduction to C++; Introduction to relevant mathematical and graphical software (MatLab, Mathematica, TecPlot); Examples that will be used to introduce the different programming approaches and tools will comprise: data interpolation and fitting; linear</p>					

	<p>algebra; numerical integration; theory and numerical solution of ordinary and partial differential equations; fundamental solutions of boundary value problems</p> <p>Assessment methods: Practical exercises, written examination</p> <p>Requirements: Bachelor in Mechanical Engineering, Materials Science or related disciplines</p>					
160 310	Seminar zu Programming Concepts in Materials Science	2st.		English	Madsen, Ma	
160 313	Introduction to Quantum Mechanics in Solid-State Physics	2st.		English	Neugebauer, Hickel	The lecture is part of the Master Course in Materials Science offered by ICAMS (module 2b-E1)
	<p>Content: Fundamental quantum mechanics (history and Heisenberg relation) Schrodinger equation and interpretation of wave functions Stationary solutions (quantum wells, tunneling and the hydrogen atom) The structure of atoms, the periodic system and bond formation Electrons in a periodic potential Crystallography in solid-state physics Types of solids and bonding (ionic, metallic, covalent) Defects in solids (point, line and planar defects)</p> <p>Requirements: Bachelor in Mechanical Engineering, Materials Science or related disciplines</p>					
160 314	Übung zu Introduction to Quantum Mechanics in Solid-State Physics	2st. n.V.		English	Neugebauer, Hickel	
160 315	Assessment and Description of Mechanical Properties of Solids	Thu. 10.00- 12.00,	NB 02/99	English	Janisch	
	<p>Learning outcomes: Students will have received an overview over defects in solids and their importance for mechanical properties of materials. They know the mechanism of basic mechanical properties of materials, by which quantities these properties are described and how these quantities are quantitatively assessed. The students also understand the metallurgical and physical origin of the properties of material and can apply the related material descriptions to engineering problems. The students comprehend the relation between microstructure and properties and know typical ranges of mechanical and functional (e.g. conductivity, coercivity, remanence) properties of the main classes of materials (Metals, ceramics, glasses, polymers).</p> <p>Subject aims: Review of elastic properties of solids; Overview over defects in solids; Introduction to concepts of mechanical properties of materials (stress-strain curves, stiffness, strength, ductility); Origin of plastic deformation and fracture; Relation between microstructure and mechanical properties; Strengthening concepts for engineering materials; Assessment methods for mechanical properties (mechanical testing)</p> <p>Assessment methods: Oral examination</p> <p>Requirements: Bachelor in Physics, Chemistry or related disciplines</p>					

160 316	Seminar zu Assessment and Description of Mechanical Properties of Solids;	1st.		English	Janisch	
160 326	Seminar: Methods of quantum field theory in solid state and high energy physics	2st.		English	Eremin, Polyakov	s.a. 160 424

Nuclei and particle physics

Course Nr	Course Title	Day, Time	Room	Language	Lecturer	Comment
160 407	Detector technology for modern hadronic and particle physics experiments	Fr, 12.15-13.45	NB 2/170	German or English	Ritman, Stockmanns	
160 408	Seminar zu Detector technology for modern hadronic and particle physics experiments	Fr, 10.15-11.45	NB 2/170	German or English	Ritman, Stockmanns	
160 424	Methods of quantum field theory in solid state and high energy physics	Fr 16.00-18.00	NB 6/173	English	Polyakov, Eremin	s.a. 160 326

Plasma and atomic physics

Course Nr.	Course Title	Day, Time	Room	Language	Lecturer	Comment
160 507	Plasma Deposition and Characterization of Nano-Structures and Thin Films	Tue. 09.00-10.30	NB 5/158	English	de los Arcos	
	Content: The goal is to provide a comprehensive overview of modern plasma techniques for the deposition of thin films and nanomaterials, with a focus on plasma assisted techniques such as sputtering and arc. The topics treated will be: -Nanotechnology (an introduction)					

	<p>-Physical Vapor deposition techniques. Mainly magnetron sputtering and arc, applied to the production of thin films, nanocomposites, and nanoparticles.</p> <p>-Plasma Enhanced Chemical Vapor deposition (dusty plasmas as a source for nanoparticles)</p> <p>-Applications and examples of special nanomaterials, such as fullerenes, carbon nanotubes, metallic or magnetic particles, etc.</p> <p>-Surface diagnostics (for exercises): X-ray Photoelectron Spectroscopy (XPS)</p>					
160 508	Übungen zur Plasma Deposition and Characterization of Nano-Structures and Thin Films	Tue. 10.30-11.30	NB 5/158	English	de los Arcos	
<p>Content: The exercises complementing the lecture will be based on practical analysis with surface sensitive techniques (mainly photoelectron spectroscopy) of the films and nanomaterials described along the course.</p>						
160 509	Spektroskopie der Atome und Ionen	Fr 14.15-16.00	NB 02/99	German or English	Träbert	Depending on the audience, the course will be offered in German or English. Begin: 19/11/2010
160 510	Quantentheorie des Lichtes I	2st.		German, English or French	Rosmej	Depending on the audience, the course can be offered in German, English or French.
<p>Requirements: Quantenmechanik I und II</p> <p>Literature Rodney Loudon, The quantum theory of light, Oxford 3rd edition 2000 C. Cohen-Tannoudji, Processus d'interaction entre photons et atomes, EDP Science/CNRS édition 2001</p>						
160 512	Dünne Schichten/Thin Films	2st		German or English	Benedikt	
<p>Summary: Thin films are of great importance in all branches of our industry. This lecture will concentrate on properties, measurements, applications and selected methods of deposition of thin films. Following topics will be treated in this lecture: 1) Applications of thin films: hard protective coatings, scratch resistant layers, optical films, dielectric layers 2) Mechanical, optical and electrical properties of thin films and diagnostic methods for their measurements: hardness, adhesion, cohesion, Scratch-Test, structural changes, thermogravimetry, X-ray diffractometry, refraction and absorption, ellipsometry, Fourier transform Infrared spectroscopy 3) Selected deposition methods of thin films: evaporation, chemical vapor deposition, Atomic layer deposition, molecular beam epitaxy, Exam: oral exam Requirements: Bachelor</p>						

FACULTY OF PSYCHOLOGY

www.rub.de/psy-dekanat/fak-home

Contact:

Dr. Andreas Utsch

Tel: 0234/32-27895

Email: andreas.utsch@rub.de

TOP TEN IN PSYCHOLOGY: SELECTED LECTURES

Language: English

Department: Psychology / Developmental Psychology

Degree programme: BSc/MSc Psychology

Course type: Seminar

Credit Points: 3

Requirements: -

Course description:

This course presents lectures by some of the leading researchers in psychology. Lectures are presented as videos. Each presentation is complemented by a recent paper by the same author, and the topic is discussed in the seminar. Questions and clarifications can be accommodated during the presentation. Participants are required to engage in discussions and provide summaries of their understanding of the topics. This course is intended to prepare students for time abroad, particularly in English-speaking countries.

Proofs of academic achievement: -

Teacher/Lecturer: Prof. Dr. Schölmerich

Room: GAFO 02/364

Day: Monday

Time: 16.15 – 17.45

Begin: 19/10/2010

INTRACELLULAR ELECTROPHYSIOLOGICAL RECORDING TECHNIQUE**Language:** English**Department:** Psychology / Mercator Research Group**Degree programme:** BSc Psychology**Course type:** Project Seminar**Credit Points:** 3**Requirements:** Basic (high school level) physics**Course description:**

Intracellular electrophysiological recording technique. Brain functions are based on the activity of single neurons. Intracellular electrophysiological recording techniques enable us to observe the activity and to study the properties of single neurons. In this seminar, students will learn in-vitro patch-clamp recording, which is a popular and powerful intracellular recording technique. This seminar consists of both theoretical background studies and practical hands-on lab experiences. In more details, students will learn 1) the theory of intracellular recording, 2) brain slice preparation using animal brains, 3) patchclamp recording, 4) visualization of recorded neurons, and 5) data analysis. Intracellular electrophysiological recording technique is not restricted to the study of single-cell properties. When combined with extra-cellular stimulation electrode, one can easily study properties of synaptic connections such as long-term synaptic potentiation and depression. Therefore, this method is also often used to study properties of neural networks which are believed to be crucial for functions of the brain.

Proofs of academic achievement: One report**Teacher/Lecturer:** JProf. Dr. Yoshida**Room:** GA 04/143**Day:** Thursday**Time:** 10.15 – 11.45**Begin:** 21/10/2010

COURSE TITLE RHYTHMS AND COGNITIVE FUNCTIONS OF THE BRAIN**Language:** English**Department:** Psychology / Mercator Research Group**Degree programme:** MSc Psychology, MA (Philosophy), MEd(Philosophy), MA(Medicine)**Course type:** Seminar**Credit Points:** 3**Requirements:** -**Course description:**

Activity of the brain is often rhythmical. Although there are many different types of rhythms with different magnitudes and frequencies, it is believed that specific types of rhythmic activity contribute to specific brain functions. This seminar focuses on the rhythmic activities that underlie cognitive functions including perceptual binding, memory encoding, consolidation and recall, as well as conceptual representation. We study roles of brain rhythms using a multidisciplinary approach that includes electrophysiological, molecular, computational, and neurosemantic perspectives. This seminar is taught by four professors with expertise in different fields. In the seminar, methods of investigation related to rhythmic activities in various different cognitive domains will be taught. Students will present related journal and book articles.

Proofs of academic achievement: Presentation with written elaboration**Teacher/Lecturer:** JProf. Dr. Motoharu Yoshida, Prof. Dr. Magdalena Sauvage, Prof. Dr. Sen Cheng, Prof. Dr. Markus Werning**Room:** GA 04/143 MRG seminar room (GA04)**Day:** Tuesday**Time:** (16.15 – 17.45)**Begin:** -

MEMORY FUNCTION: NOVEL BEHAVIOURAL, MOLECULAR AND IMAGING TECHNIQUES**Language:** English**Department:** Psychology / Mercator Research Group**Degree programme:** This seminar is open to students of the Medicine, Psychology, Biochemistry and Biology departments**Course type:** Seminar**Credit Points:** 3**Requirements:** -**Course description:**

This seminar focuses on the latest behavioural, molecular and imaging techniques and their application to the study of memory function. These methods go beyond the spatial and temporal resolution of standard techniques and led to important new findings in the area of memory research. We will focus on how these tools are used to show that the different areas of the medial temporal lobe, a structure crucial for memory function and damaged in aging and amnesic patients, contribute to different aspects of memory (spatial versus non-spatial, familiarity versus recollection etc..) although it was originally thought to be a single functional entity. The techniques described in this seminar include: inducible and region specific brain mutagenesis, molecular brain imaging based on the detection of immediate-early genes, high resolution brain fMRI, diffusion tensor imaging, light-activated channels and behavioural translational paradigms (standard human tasks adapted to animals). Advantages and limits of these new techniques are contrasted with those of the standard techniques currently used to investigate memory function. Background on each technique is provided during the class and the presentation of related scientific articles (journal club) follows.

Proofs of academic achievement: Presentation and short test**Teacher/Lecturer:** Prof. Dr. Sauvage**Room:** GA 04/143**Day:** Wednesday**Time:** 16.15 – 17.45**Begin:** 20/10/2010

FACULTY OF SOCIAL SCIENCE

www.sowi.rub.de

Contact:

Sandra Quade

Tel: 0234/32- 22966

Email: international-services@sowi.rub.de

POSTCOLONIAL PRACTICES

Language: English

Department: Chair of Social Anthropology

Degree programme: Bachelor

Course type: Seminar

Credit Points: Evidence of participation (Teilnahmeschein): 2 CP

Evidence of achievement (Leistungsschein): 4 CP

Requirements: Good command of spoken and written English.

Course description: At least three quarters of the world population has experienced the effects of colonialism and decolonisation, which are still actively shaping social, political and cultural practices within and beyond national borders. The seminar aims at providing an insight into the most salient tendencies in contemporary global art, literature and society, and the practical applications of postcolonial theories ranging from literary revisions of the collective past to feminist art to antiglobalist protest movements.

Proofs of academic achievement: For evidence of participation (Teilnahmeschein) the students have to participate actively in all sessions (two failures maximum) and prepare and hold a presentation. For evidence of achievement (Leistungsschein) the students additionally have to prepare and hold at least one presentation in the seminar with term paper of about 12-15 pages or have to sit an exam (for further details please do not hesitate to contact the lecturer). This course may be chosen for part II of the B.A. course unit "Cultural Change and Migration/Kultureller Wandel und Migration (KuWaMi)". In order to complete the course unit on B.A. level students have to choose another course from the same unit which is just available in German. Complete B.A. course unit/Module is equivalent to 8 CP.

Teacher/Lecturer: (Prof. Dr. Vorname Nachname) Gala Rebane

Room: GBCF 05/604

Day: Wednesday

Time: 10.15 – 11.45

Begin: 13/10/2010

This course is especially suitable for exchange students.

THEORY AND METHODS OF COMPARATIVE AND TRANSNATIONAL RESEARCH IN ORGANISATION OF WORK

Language: English

Department: Chair of Sociology/Organisation, Migration, Participation

Degree programme: Master

Course type: Seminar

Credit Points: Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Concluded basic studies for Diploma students (Grundstudium) or concluded B.A., active participation in all sessions.

Course description:

Much more than a simple method, comparative research in social sciences is a basic methodology to increase knowledge and understanding. This is partly due to the limited opportunities of organising experimental research designs like in sciences as physics or biology. John Stuart Mill (1806-73) developed the basic reasoning for comparative research as a quasi-experimental situation in that variations between and inside units of analysis could be systematically observed and - by controlling for relevant context variables - attributed to causal influencing factors. In a similar way, Emile Durkheim argued (1895) that "the comparative Sociology is not any sub-discipline of Sociology, but the Sociology itself insofar as it is not descriptive anymore but focuses on an analysis of the facts". Besides the rich tradition of international comparative studies, during the last twenty years there arose a new line of transnational research. The course aims at (1) transmitting the fundamental epistemological significance and the basic types and methodological problems of comparative research, (2) introducing to transnational studies and (3) introducing into the field of international comparative analysis of the organisation of work. The method will be (1) to read and summarize basic articles and chapters by all students, (2) to present and discuss examples of seminal studies of international comparison of work organisation, and (3) to develop comparative case studies of selected profit- and governmental organizations.

Proofs of academic achievement: This course may be chosen for part I of the M.A. course unit "Labour, Organisations and Society/Arbeit, Organisation und Gesellschaft (AOG)". In order to complete this M.A. course unit with both parts in English, students have to attend the second course "Theory and methods of comparative and transnational research in organisation of work" and take a viva voce exam after having completed both courses. The complete M.A. course unit/Modul is equivalent to 9 CP. Nevertheless, to complete the M.A. course unit students may also choose a course from the course unit in German and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade).

Requirements for a 'proof of participation' (Teilnahmenachweis): Continuous and active participation (including if necessary a short presentation of a basic text) and elaboration of written resumes (1-2 pages each) of the basic seminar literature.

Requirements for a 'proof of performance' (Leistungsnachweis): Same as above as well as a written term paper (15-20 pages).

Teacher/Lecturer: Prof. Dr. phil. Ludger Pries

Room: GC 03/46

Day: Thursday

Time: 16.15 – 17.45

Begin: 14/10/2010

This course is especially suitable for exchange students

This course is part of a module taught in entirely in English: Module “Labour and Organisations and Society/Arbeit, Organisation und Gesellschaft (AOG)”

THEORY AND METHODS OF COMPARATIVE AND TRANSNATIONAL RESEARCH IN ORGANISATION OF WORK

Language: English

Department: Chair of Sociology / Organisation, Migration, Participation

Degree programme: Master

Course type: Seminar

Credit Points: Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Valid for M.A.-Module "Work Organisation Society" (AOG, part 1). Important: Change of course contents will pronounced by the new lecturer.

Course description:

Much more than a simple method, comparative research in social sciences is a basic methodology to increase knowledge and understanding. This is partly due to the limited opportunities of organising experimental research designs like in sciences as physics or biology. John Stuart Mill (1806-73) developed the basic reasoning for comparative research as a quasi-experimental situation in that variations between and inside units of analysis could be systematically observed and - by controlling for relevant context variables - attributed to causal influencing factors. In a

similar way, Emile Durkheim argued (1895) that "the comparative Sociology is not any subdiscipline of Sociology, but the Sociology itself insofar as it is not descriptive anymore but focuses on an analysis of the facts". Besides the rich tradition of international comparative studies, during the last twenty years there arose a new line of transnational research. The course aims at (1) transmitting the fundamental epistemological significance and the basic types and methodological problems of comparative research, (2) introducing to transnational 160 studies and (3) introducing into the field of international comparative analysis of the organisation of work. The method will be (1) to read and summarize basic articles and chapters by all students, (2) to present and discuss examples of seminal studies of international comparison of work organisation, and (3) to develop comparative case studies of selected profit- and governmental organizations.

Proofs of academic achievement:

This course may be chosen for part II of the M.A. course unit "Labour, Organisations and Society/Arbeit, Organisation und Gesellschaft (AOG)". In order to complete this M.A. course unit with both parts in English, students have to attend the second course "Theory and methods of comparative and transnational research in organisation of work" and take a viva voce exam after having completed both courses. The complete M.A. course unit/Modul is equivalent to 9 CP. Nevertheless, to complete the M.A. course unit students may also choose a course from the course unit in German and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade).

Requirements for a 'proof of participation' (Teilnahmenachweis): Continuous and active participation (including if necessary a short presentation of a basic text) and elaboration of written resumes (1-2 pages each) of the basic seminar literature.

Requirements for a 'proof of performance' (Leistungsnachweis): Same as above as well as a written term paper (15-20 pages).

Teacher/Lecturer: N.N., Prof. Dr. phil. Ludger Pries

Room: GBCF 05/608

Day: Thursday

Time: 12.15 – 13.45

Begin: 14/10/2010

This course is part of a module taught in entirely in English: Module "Labour and Organisations and Society/Arbeit, Organisation und Gesellschaft (AOG)".

INDUSTRIAL RELATIONS IN EUROPE: CONCEPTS - MODELS - DEVELOPMENTS**Language:** English**Department:** Chair of Sociology/Organisation, Migration, Participation**Degree programme:** Master**Course type:** Seminar**Credit Points:** Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Concluded basic studies for Diploma students (Grundstudium) or concluded B.A., active participation in all sessions.**Course description:**

This seminar gives an introduction to the concepts and models of Industrial Relations to develop instruments for typification and comparison of welfare systems and labour relations in Europe.

Proofs of academic achievement:

For evidence of participation (Teilnahmeschein) the students have to participate actively in all sessions (two failures maximum) and prepare and hold a presentation. For evidence of achievement (Leistungsschein) the students additionally have to prepare and hold at least one presentation in the seminar with term paper of about 15-20 pages. This course may be chosen for part II of the M.A. course unit "Labour Regulation and Participation/Erwerbsregulierung und Partizipation(E&P)". In order to complete the course unit on M.A. level students have to choose another course from the course unit and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade). Complete M.A. course unit/Modul is equivalent to 9CP.

Teacher/Lecturer: Dr. Manfred Wanöffel**Room:** GC 03 / 33**Day:** Tuesday**Time:** 14.15 – 15.45**Begin:** 12/10/2010**This course is especially suitable for exchange students.**

PATIENT RIGHTS AND HEALTHCARE COMPLAINTS**Language:** English**Department:** Chair of Social Policy and Public Economy**Degree programme:** Master**Course type:** Compact Course**Credit Points:** Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Concluded basic studies for Diploma students (Grundstudium) or concluded B.A., active participation in all sessions.**Course description:**

A number of social, economic, cultural, ethical und political developments have led to patient rights and healthcare complaints becoming increasingly important issues for health systems. This seminar will consider Germany`s approach to these issues via an international comparative analysis. While there will be substantial overlaps, the course will be divided into three parts:

1. Background: Medical Error: prevalence, human/economic impact, types of errors (person/system). Patient Safety Movement: patient centred care, safety culture, initiatives in Germany.
2. Patient Rights: Nature of rights: positive/negative rights, social/individual rights. Models of regulation: special legislation, split legislation, charters. Implementation: influence of culture (medical/national), impact of resource constraints. Protection of rights: right to complain.
3. Healthcare Complaints: Purpose of complaint systems: accountability/quality improvement. Outcomes sought: compensation/non-monetary outcomes. 180 Approaches to healthcare complaints: malpractice litigation, health ombudsman, insurance. Issues: natural justice, hindsight/outcome bias, defensive medicine.

Proofs of academic achievement:

For evidence of participation (Teilnahmeschein) the students have to participate actively in all sessions (two failures maximum) and prepare and hold a presentation. For evidence of achievement (Leistungsschein) the students additionally have to prepare and hold at least one presentation in the seminar with term paper of about 15-20 pages. This course may be chosen for part I/II of the M.A. course unit "Particular and current fields of health care/Spezielle und aktuelle Bereiche des Gesundheitswesens (SAG)". In order to complete the course unit on M.A. level students have to choose another course from the course unit and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade). Complete M.A. course unit/Modul is equivalent to 9CP.

Teacher/Lecturer: Stuart McLennan**Room, Day, Time, Begin:** to be announced.**This course is especially suitable for exchange students.**

TRANSNATIONAL ACTIVISM, CIVIL SOCIETY AND DEVELOPMENT

Language: English

Department: Junior Professorship Internationalization and Development Studies

Degree programme: Master

Course type: Seminar

Credit Points: Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Capability of reading English literature, discussing and presenting in English.

Course description:

The course will provide an overview over contemporary concepts in the field of transnational activism and civil society. After a short introduction into methodological premises, alternative approaches to global dimensions of activism across borders, especially with regard to local and national development processes will be investigated. This will be done on the basis of a comparative focus on empirical examples, with a special focus on South Asia.

Proofs of academic achievement: This course may be chosen for part II of the M.A. course unit "International Institutions and Processes/Internationale Institutionen und Prozesse (IIP)". In order to complete this M.A. course unit with both parts in English, students have to attend the course "Trading up? Emerging Powers in the trading system" or "Emerging Powers in International Affairs" and take a viva voce exam after having completed both courses. The complete M.A. course unit/Modul is equivalent to 9 CP. Nevertheless, to complete the M.A. course unit students may also choose a course from the course unit in German and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade).

For evidence of participation (Teilnahmeschein) the students have to participate actively in all sessions (two failures maximum) and prepare and hold a presentation. For evidence of achievement (Leistungsschein) the students additionally have to prepare and hold at least one presentation in the seminar with term paper of about 15-20 pages.

Teacher/Lecturer: (Prof. Dr. Vorname Nachname) Dr. Eva Gerharz

Room: GC 04/703

Day: Friday

Time: 10.15 – 13.45

Begin: 15/10/2010

This course is especially suitable for exchange students.

This course is part of a module taught in entirely in English: Module "International Institutions and Processes/Internationale Institutionen und Prozesse (IIP)".

TRADING UP? EMERGING POWERS IN THE TRADING SYSTEM**Language:** English**Department:** Chair of Political Science/International Relation**Degree programme:** Master**Course type:** Seminar**Credit Points:** Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Attending the lecture of "Introduction into the International Relations/Einführung in die Internationale Beziehung".**Course description:**

States like India, Brazil, China, Russia and South Africa have been getting lots of attention recently. Given the descriptions of them as "emerging powers," "second-tier states" and "middle powers" - all of which implicitly include assumptions of power aspirations for these states - the obvious question is how to explain the behavior of these states, both in terms of their present behavior and in terms of what the world can expect in the future. This course uses International Political Economy, Development, and International Relations theories to explore one potential field of policy action for these states: trade. Trade is an apt case study, since it not only plays an increasingly important role in these states' economies, but as it is also an opportunity to observe the interaction between political and economic motivations in these states. Specifically, the seminar will explore the different roles played by varying types of trade agreements (multilateral, regional, interregional, bilateral) and various trade partners (so-called Southern versus Northern).

Proofs of academic achievement:

This course may be chosen for part I of the M.A. course unit "International Institutions and Processes/Internationale Institutionen und Prozesse (IIP)". In order to complete this M.A. course unit with both parts in English, students have to attend the course "Transnational activism, civil society and development" or "Emerging Powers in International Affairs" and take a viva voce exam after having completed both courses. The complete M.A. course unit/Modul is equivalent to 9 CP. Nevertheless, to complete the M.A. course unit students may also choose a course from the course unit in German and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade).

For evidence of participation (Teilnahmeschein): delivery of reports in due time, presentation and handout, regular attendance of the meetings and active participation in the discussions.

For evidence of achievement (Leistungsschein): the students additionally have to prepare and hold at least one presentation in the seminar with term paper of about 15-20 pages.

Teacher/Lecturer: Laura Carsten

Room: GC 03/146

Day: Thursday

Time: 10.15 – 11-45

Begin: 14/10/2010

This course is especially suitable for exchange students.

This course is part of a module taught in entirely in English: Module “International Institutions and Processes/Internationale Institutionen und Prozesse (IIP)”.

EMERGING POWERS IN INTERNATIONAL AFFAIRS

Language: English

Department: Chair of Political Science/International Relation

Degree programme: Master

Course type: Seminar

Credit Points: Evidence of participation (Teilnahmeschein): 3 CP

Evidence of achievement (Leistungsschein): 5 CP

Requirements: Fluency in English, ability to address current issues.

Course description:

The first decade of the 21st century has been characterised by the rise of new powers, namely Brazil, China, India and Russia. Some authors include Indonesia and South Africa in this group. During the recent financial crisis, the global economy was receiving, for the first time, crucial support from emerging powers, namely China. Emerging powers are increasingly demanding greater influence in international affairs and do no longer accept the dominance of the old transatlantic powers. Some of the issues that will be discussed in the seminar are:

- What are the economic consequences of rise of the BRICs?
- Are the BRICs thinking about a revision of the existing global order? Is the emergence of a competing regime possible?
- What does the rise of these players mean for the future of globalisation?
- Do the four main players have a similar or a diverging agenda?
- Is competition useful for third countries? Could Africa be one of the winners of the rise of the BRICs?

Proofs of academic achievement:

This course may be chosen for part I/II of the M.A. course unit "International Institutions and Processes/Internationale Institutionen und Prozesse (IIP)". In order to complete this M.A. course unit with both parts in English, students have to attend the course "Transnational activism, civil society and development" or "Trading up? Emerging Powers in the trading system" and take a viva voce exam after having completed both courses. The complete M.A. course unit/Modul is equivalent to 9 CP. Nevertheless, to complete the M.A. course unit students may also choose a course from the course unit in German and take a viva voce exam after having completed both courses (for further information please do not hesitate to contact the ERASMUS coordinator Sandra Quade).

For evidence of participation (Teilnahmeschein) the students have to participate actively in all sessions (two failures maximum) and prepare and hold a presentation.

For evidence of achievement (Leistungsschein) the students additionally have to prepare and hold at least one presentation in the seminar with term paper of about 15-20 pages.

Teacher/Lecturer: PD Heribert Dieter

Room: GC 04/304

Day: Thursday

Time: 10.15 – 11.45

Begin: 15/10/2010

This course is especially suitable for exchange students.

This course is part of a module taught in entirely in English: Module "International Institutions and Processes/Internationale Institutionen und Prozesse (IIP)".

INSTITUTE FOR DEVELOPMENT RESEARCH AND DEVELOPMENT POLICY

<http://www.rub.de/iee>

Contact:

Dr. Katja Bender

Tel: 0234/3226149

Email: Katja.Bender@rub.de

LECTURE CYCLE "INTERNATIONAL DEVELOPMENT STUDIES"

Language: English

Department: Institute of Development Research and Development Policy

Degree programme: PhD

Course type: Lecture

Credit Points: 4

Requirements: Admission to doctoral studies

Course description:

Participants shall engage in a discussion about the concept and definition of "development". Alternative concepts of development theory as well as approaches to the measurement of development will be presented and discussed from the perspective of different disciplines.

Proofs of academic achievement: -

Teacher/Lecturer: Lecturers of the PhD in International Development Studies

Room: -

Day: -

Time: -

Begin: for further information please contact Dr. Katja Bender (Katja.Bender@rub.de)

GROWTH AND DEVELOPMENT**Language:** English**Department:** Institute of Development Research and Development Policy**Degree programme:** PhD**Course type:** Lecture & Seminar**Credit Points:** 4**Requirements:** Admission to doctoral studies**Course description:**

Participants will be able to classify the most important approaches of growth theory with regard to theoretical and empirical relevance for the explanation of success and failure of development.

Proofs of academic achievement: Paper (70%) & oral presentation & discussion (30%)**Teacher/Lecturer:** Prof. Dr. Wilhelm Löwenstein**Room:** -**Day:** -**Time:** -**Begin:** for further information please contact Dr. Katja Bender (Katja.Bender@rub.de)

INTERNATIONAL TRADE**Language:** English**Department:** Institute of Development Research and Development Policy**Degree programme:** PhD**Course type:** Lecture & Seminar**Credit Points:** 4**Requirements:** Admission to Doctoral Studies**Course description:**

Participants will get familiar with advantages and risks of globalisation for developing countries and the role of the WTO. They will be able to apply theories of international trade to developing countries

Proofs of academic achievement: Paper & oral presentation**Teacher/Lecturer:** Prof. Dr. Dieter Bender**Room:** -**Day:** -**Time:** -**Begin:** for further information please contact Dr. Katja Bender (Katja.Bender@rub.de)

ECONOMICS AND CULTURE**Language:** English**Department:** Institute of Development Research and Development Policy**Degree programme:** PhD**Course type:** Lecture & Seminar**Credit Points:** 4**Requirements:** Admission to Doctoral Studies**Course description:**

Participants will be aware of cultural conditionality of existing economic systems in developing and transition economies.

They have referred to the example of the Islam to work on the conflicting area between compatibility of economic incentives and religious values and norms.

Proofs of academic achievement: Paper & oral presentation**Teacher/Lecturer:** Prof. Dr. Volker Nienhaus**Room:** -**Day:** -**Time:** -**Begin:** for further information please contact Dr. Katja Bender (Katja.Bender@rub.de)

INSTITUTE FOR MEDICAL ETHICS AND HISTORY OF MEDICINE

DIRECTOR: PROF. DR. MED. DR. PHIL. JOCHEN VOLLMANN

Invitation to public evening lecture

In the context of the interdisciplinary Colloquium for young researchers „Human Medical Research: ethical, economical and socio-cultural aspects“

Prof. Michael Parker PhD

**ETHOX Centre for Ethics and Communication in Health Care Practice
University of Oxford**

will speak to:

When is Medical Research in Developing Countries Ethical?*

Wednesday, 09th February 2011, 18.30-20.00.

Institute for Medical Ethics and History of Medicine
Malakowturm, Markstr. 258a, 44799 Bochum

* Professor Parker will hold the lecture in English. The discussion will be German and English.

CENTER FOR FOREIGN LANGUAGE TRAINING

www.rub.de/zfa

Contact:

Ms. Jennifer Wenderoth

Tel: 0234/32- 28182

Email: zfa@rub.de

a) Language Courses

The Centre for Foreign Language Training (Zentrum für Fremdsprachenausbildung -ZFA) provides courses aimed at specialist and non-specialist language learners with a particular focus on the key attributes of developing cultural awareness and intercultural communicative competence in an academic setting. Classes take place during the semester and- in the form of intensive courses- during the semester break.

The Language Centre currently offers classes for 20 different languages, such as:

Arabian, Chinese, Danish, Dutch, English, French, Hungarian, Italian, Japanese, Croatian/Bosnian/Serbian, Greek, Norwegian, Polish, Portuguese, Russian, Swedish, Spanish and Turkish.

b) German as a Foreign Language

In addition to the language courses listed above, there are numerous offers for German as a Foreign language. In addition to preparatory courses there are a lot of courses that may be taken during the semester in addition to regular studies. These courses are designed for the special needs of foreign students, doctorals and guest researchers.

c) Certification

In some of the courses for the languages listed above there is the possibility to achieve special certificates:

TestDaF (Deutsch als Fremdsprache- German as a Foreign Language)

UNICert® (English, French, Italian, Polish, Russian, Swedish, Spanish)

DELE (Spanish)

CNaVT (Dutch)

Swedex (Swedish)

d) Individual Learning

The ZFA also provides various opportunities for individual learning and offers support via counselling individual assistance:

- Tandem (Partners with different mother tongue that exchange and support one another in learning the other language)
- Centre for self- organized learning
- Language- learning counselling

Impressum

Edited and Published by:

International Office
Dezernat 2
Ruhr-Universität Bochum
Forum Nord Ost (FNO) 01 / 02
Universitätsstrasse 150
D-44780 Bochum

Print run:

1000 copies

Printed in September 2010