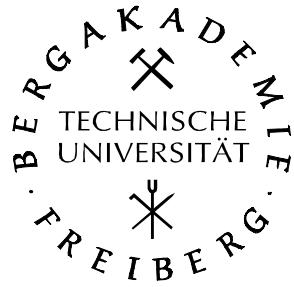


# **Amtliche Bekanntmachungen der TU Bergakademie Freiberg**

**Nr. 4 vom 22. Januar 2008**

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**Modulhandbuch**

**für den**

**Masterstudiengang  
International Management of Resources &  
Environment**

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<b>#Modul-Code</b>	ECOTHE .MA.Nr.
<b>#Modulname</b>	Economic Theory
<b>#Verantwortlich</b>	<b>Name</b> Schönfelder <b>Vorname</b> Bruno <b>Titel</b> Prof. Dr.
<b>#Dauer Modul</b>	1 semester
<b>#Qualifikationsziel e/Kompetenzen</b>	Students will be enabled to analyze economic problems from the micro-economic and macro-economic perspective.
<b>#Inhalte</b>	The course consists of a microeconomics and a macroeconomics section. The micro section covers topics such as the firm, supply and demand, competition and monopoly, labor markets. The macro section covers topics such as theory of interest, economic growth and business cycles, money, general equilibrium.
<b>#Typische Fachliteratur</b>	Barro, R. (1998): Macroeconomics, 5 <sup>th</sup> edition, Cambridge (Mass.); MIT-Press. Pindyk, R.S. ; Rubinfeld, D.L. (2001): Microeconomics, 5 <sup>th</sup> edition, London et al., Prentice Hall. Friedman, D. (1996): Hidden Order, New York: Harper.
<b>#Lehrformen</b>	Lectures (2 SWS) and tutorials (2 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No previous knowledge of economics is required.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for the MBA IMRE Programme and for the Master Programme in International Business in Emerging and Developing Markets (IBDEM).
<b>#Häufigkeit des Angebotes</b>	The course is offered once in the academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A midterm test will be offered, this is a prelim. At the end of course there will be a written exam of 90 minutes. Successful participation in the prelim and the fulfillment of up to three assignments are prerequisites for participating in the exam. Further details are announced in class.
<b>#Leistungspunkte</b>	6
<b>#Note</b>	The grade earned in the written exam determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 180 hours, of which 60 hours are spent in class and the remaining 120 hours are spent on self-study.

#Modul-Code	ECODEV .MA.Nr.
#Modulname	International Economics and Development
#Verantwortlich	Name Brezinski Vorname Horst Titel Prof. Dr.
#Dauer Modul	1 semester
#Qualifikationsziel e/Kompetenzen	Students will be able to understand the specific economic problems arising from international activities and to analyse the issues of trade policy, of international monetary aspects, such as exchange rate policy and indebtedness, and development. Because students take a particular interest in companies involved in a region that is characterised by much lower levels of economic development, management of these firms have to consider the implications that development strategies have on their activities. Those include most prominently export-oriented policies, state-aid policies and the development of national champions, the attraction of foreign direct investments and incentive systems for outward investment.
#Inhalte	The cluster is composed of two courses: International economic relations (trade theory and policy) and Economic Development
#Typische Fachliteratur	Krugman, P. R. ; Obstfeld, M. (2005): International Economics – Theory and Practice. 7 th edition, Addison-Wesley, New York. Todaro, M. P. (2006): Economic Development, 9th edition, Addison Wesley, New York.
#Lehrformen	Lectures (2 SWS) and tutorials (2 SWS).
#Voraussetzung für die Teilnahme	Basic knowledge in micro and macroeconomics is required.
#Verwendbarkeit des Moduls	The cluster is particularly appropriate for the MBA IMRE Programme. As well as for the Master Programme in International Business in Emerging and Developing Markets
#Häufigkeit des Angebotes	All courses are taught once per academic year. The cluster starts in summer term.
#Voraussetzung für Vergabe von Leistungspunkten	For each of the courses within the cluster a presentation has to be done as well as a final written test of 60 minutes for each course will have to be taken.
#Leistungspunkte	6
# Note	The overall mark for the cluster is computed as the arithmetic average of the marks for the two courses within the cluster.
#Arbeitsaufwand	The total time budget for the cluster is set at 180 hours, of which 60 hours are spent in class and the remaining 120 hours are spent on self-study. Self-studies include assignments, preparation and wrapping up of lectures as well as preparation of presentations and of examinations.

#Modul-Code	INTLAW1 .MA.Nr.
#Modulname	Aspects of the International Law of Resources & Environment 1
#Verantwortlich	Name Wolf Vorname Rainer Titel Prof. Dr.
#Dauer Modul	1 Semester
#Qualifikationsziel e/Kompetenzen	The purpose of the cluster is to give an introduction to the basic terms of law and to legal problems related to resources and environment in international law. Students without a law background will be enabled to understand the characteristics of these fields as such, before turning to a range of more specific questions. After completion, students should be able to identify the legal issues of simple cases in the fields of law discussed and to decide on them using the established legal methods.
#Inhalte	<p>Subject of the course are three topics.</p> <p>1. General Introduction to Law and Legal Terms This part will comprise the teaching of basic legal terms and an introduction to the different fields and the interpretation of law.</p> <p>2. Sovereignty, Resources and Environment By discussing different cases, problems of allocation of resources (e.g. water, oil, gas) between states and related environmental and transport issues will be demonstrated.</p> <p>3. WTO: Conflicts Between Trade and Environment Decisions of the WTO panel regarding conflicts of national environmental protection measures and free trade will be presented.</p> <p>In case of sufficient time and interest a moot court will be offered for the students. There is an appropriate elective dedicated to international law that is recommended to be taken by students with a special interest in legal issues as it completes this cluster.</p>
#Typische Fachliteratur	Shaw, M. N. (2003): International Law, 5 <sup>th</sup> ed.; Sands, P. (2003): Principles of International Environmental Law, 2 <sup>nd</sup> ed.; Goyal, A. (2006): The WTO and International Environmental Law.
#Lehrformen	Lectures (1 SWS) and tutorials (1 SWS).
#Voraussetzung für die Teilnahme	No previous knowledge of law is required.
#Verwendbarkeit des Moduls	The cluster is primarily intended for students of the MBA IMRE Programme, but it is also open to all other students.
#Häufigkeit des Angebotes	The course is taught once per academic year in winter term.
#Voraussetzung für Vergabe von Leistungspunkten	A written test of 90 minutes length will have to be taken.
#Leistungspunkte	3
#Note	The mark for the cluster is equivalent to the mark of the examination in the mandatory part.
#Arbeitsaufwand	The total time budgeted for the mandatory part of the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study. Self-studies include assignments, preparation and wrapping up of lectures as well as preparation of examinations.

#Modul-Code	OMIS .MA.Nr.
#Modulname	Operations Management & Information Systems
#Verantwortlich	Name Felden Vorname Carsten Titel Prof. Dr.
#Dauer Modul	1 Semester
#Qualifikationsziel e/Kompetenzen	Students become familiar with important tasks of management in organisations which relate to operations, information flows and the management of projects.
#Inhalte	<p>Management includes a large and varied set of subjects, each of which have their respective meanings in Business Administration. This cluster groups together 3 courses, each with a dedicated profile, focussing on</p> <ul style="list-style-type: none"> <li>(1) Operations (materials, lot sizing, material resource planning, rolling schedule, assembly line balancing, etc.)</li> <li>(2) Project Management (Management and the Matrix Form, Responsibilities of Parties, Key Concepts of Project Management, Project Scheduling / Critical Path Method, Procurement / Realisation of Projects).</li> <li>(3) Planning, monitoring and controlling of the information infrastructure of an enterprise are taking the centre stage of this lecture. Management tasks and IT specific solutions are discussed on the strategic, tactical and operational levels inside an enterprise. The lecture is especially focused on enterprise modelling, decision support and knowledge management in enterprises. Selected methods, procedures and tools for the business process modelling are exemplarily presented and used in the exercise practically. The content of the lecture is shown on examples of the energy market.</li> </ul>
#Typische Fachliteratur	<p>Stevenson, W. J. (2005): Operations Management, 8th ed., Boston u.a., McGraw-Hill Irwin; Gilbreath, R.D. (1986): Winning at Project Management, New York, Wiley; Oberlender, G.D. (2000): Project Management for Engineering and Construction, 2<sup>nd</sup> edition, Boston, McGraw-Hill; Walker, A. (1996): Project Management in Construction, 3<sup>rd</sup> edition, Oxford, Blackwell Science; Nahmias, S. (1977): Production and Operations Analysis. 3rd edition. Chicago, Irwin; Turban, E.; Aronson, J. E.; Liang, T. P. (2004): Decision Support Systems and Intelligent Systems, 7th ed. Upper Saddle River, N.J., Prentice Hall; Inmon, W. H.; Hackethorn, R. D. (1994): Using the Data Warehouse, New York, John Wiley &amp; Sons; Shapiro, C.; Varian, H. A. (1999): Information Rules, Boston, Havard Business School Press; Silver, E.A.; Pyke, D.F.; Peterson, R. (1998): Inventory Management and Production Planning and Scheduling, 3rd edition, New York, Wiley.</p>
#Lehrformen	Lectures (3 SWS) and tutorials (3 SWS).
#Voraussetzung für die Teilnahme	No previous knowledge of economics is required. Good command of mathematics is desirable.
#Verwendbarkeit des Moduls	The cluster is particularly appropriate for the MBA IMRE Programme.
#Häufigkeit des Angebotes	All courses are taught once per academic year. The cluster starts in winter term.

<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	For each of the three courses within the cluster, final tests in written form each of 90 minutes length will have to be taken.
<b>#Leistungspunkte</b>	9
<b>#Note</b>	The overall mark for the cluster is computed as the arithmetic average of the marks for the three courses within the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted is set at 270 h, of which 90 h are spent in class and the remaining 180 h are spent on self-study (including assignments, preparation, wrapping up of lectures and preparation of examinations).

<b>#Modul-Code</b>	COACC.MA.Nr.
<b>#Modulname</b>	Cost Accounting and Controlling
<b>#Verantwortlich</b>	<b>Name</b> Rogler <b>Vorname</b> Silvia <b>Titel</b> Prof. Dr.
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Students will be enabled to apply different methods of cost accounting and controlling to provide the management with guidance for operational and strategical decisions.
<b>#Inhalte</b>	first part: Basics of Cost Accounting, Cost Category Accounting, Cost Center Accounting, Cost Unit Accounting, Operating Income Statement second part: Basics of Controlling, Operations Management, Strategic Management.
<b>#Typische Fachliteratur</b>	Hornsgren, C.; Bhimani; A., et al.: Management and Cost Accounting; New Jersey USA 2004; Hornsgren, C.; Foster, G.; et al.: Cost Accounting; New Jersey USA 2005.
<b>#Lehrformen</b>	Combined lecture and tutorial (2 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No previous knowledge is required.
<b>#Verwendbarkeit des Moduls</b>	The course is particularly appropriate for the MBA IMRE Program.
<b>#Häufigkeit des Angebotes</b>	Once a year; in winter term.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Final test in written form (90 minutes); at least 50 % to pass.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the exam determines the grade for the course.
<b>#Arbeitsaufwand</b>	The total time budgeted for the course is set at 90 h, of which 30 h are spent in class and the remaining 60 h are spent on self-study. Self-studies include assignments, preparation and wrap-up of lectures as well as preparation for examination.

<b>#Code</b>	BUSMAN .BA.Nr.
<b>#Name</b>	Aspects of Business Management
<b>#Responsible</b>	<b>Name</b> Nippa <b>Vorname</b> Michael <b>Titel</b> Prof. Dr.
<b>#Duration</b>	1 Semester
<b>#Competencies</b>	Theoretical and practical knowledge about key issues of business management in organizations such as the nature of marketing as market-oriented management, aspects of human resources and organizational behaviour, as well as investment analysis and financial policy.
<b>#Content</b>	<p>Within the MBA IMRE Programme this cluster comprises three main courses. The grouping of these courses into one cluster can be justified by the interdependencies among them in reference to their functionality within Business Administration:</p> <p>(1) Marketing (Introduction, Marketing in a changing world, the Marketing Analysis, Macro- and Microenvironment of the Company, developing Marketing Strategies, Consumer Behaviour and Market Research, developing the Marketing Mix, managing Marketing, etc.).</p> <p>(2) Human Resources Management (changing Nature of HRM, strategic HRM Planning, analyzing and identifying Jobs, recruiting in labour markets, selecting and placing HR, individual behaviour, differences, values and ethics, perception and attributions, motivation, training and developing HR, compensating HR, group &amp; social processes, etc.).</p> <p>(3) Investment and Finance (Basic principles of Corporate Investments (Net Present Values, Internal Rates of Return), fundamentals of Corporate Finance (equity, credit, mezzanine capital)).</p>
<b>#Literature</b>	<p>Kotler, Ph.; Armstrong, G. (2001): Principles of Marketing, International Edition, Prentice Hall.</p> <p>Baron, J. N.; Kreps, D. M. (1999): Strategic Human Resources, New York et al.</p> <p>Mathis, R. L. &amp; Jackson, J. H. (2000): Human Resource Management, 9th ed., Cincinnati, South-Western College Publishing.</p> <p>Buelens M.; Kreitner, R. &amp; Kinicki A. (1999): Organizational Behaviour, London et al., McGraw-Hill.</p> <p>Brealey, R. A.; Myers, S. C.; Allen, F. (2006): Principles of Corporate Finance, 8<sup>th</sup> ed., Boston et al.</p> <p>Van Horne, J.C./Wachowicz jr., J.M. (2005): Fundamentals of Financial Management, 12<sup>th</sup> ed., Harlow et al.</p>
<b>#Types of Teaching</b>	Lectures, practical exercises and assignments
<b>#Pre-requisites</b>	No previous knowledge of business administration is required. Good command of mathematics is desirable for Investment & Finance.
<b>#Applicability</b>	The cluster is particularly appropriate for the MBA IMRE Programme.
<b>#Frequency</b>	All courses are taught once per academic year.
<b>#Requirements for credit points</b>	For each of the three courses within the cluster, final tests in written form (Marketing: 90 minutes – Human Resources & Organizational Behaviour: 60 minutes – Investment & Finance: 90 minutes

	duration) will have to be taken.
<b>#Credit points</b>	Students can earn 9 credit points.
<b>#Grades</b>	The overall mark for the cluster is computed as the arithmetic average of the marks for the three courses within the cluster.
<b>#Amount of work</b>	The total time budgeted for the cluster is set at 270 hours, of which 90 hours are spent in class and the remaining 180 hours are spent on self-study.

#Modul-Code	MAO .MA.Nr.
#Modulname	Management of Organizations
#Verantwortlich	Name Nippa Vorname Michael Titel Prof. Dr.
#Dauer Modul	1 Semester
#Qualifikationsziel e/Kompetenzen	The cluster id dedicated to the management of organizations. Theoretical and practical knowledge about key issues of organizational behaviour & the management of human resources within an organization complete the content of this cluster. The theme of corporate ethics, the need to develop corporate ethics policies for a variety of reasons is part of this cluster.
#Inhalte	Within the MBA IMRE Programme this Cluster comprises two courses both dealing with matters of organizational management: (1) Human Resources Management (changing Nature of HRM, strategic HRM Planning, analyzing and identifying Jobs, recruiting in labour markets, selecting and placing HR, individual behaviour, differences, values and ethics, perception and attributions, motivation, training and developing HR, compensating HR, group & social processes, etc.) (2) Corporate Ethics (overview of philosophical concepts: utilitarianism, Kant and discourse ethics, transfer of these individual concepts to institutions, business ethic principals and guidelines for decision-making, moral dimensions of strategy, structure, leadership, culture and self-regulation).
#Typische Fachliteratur	Mathis, R. L. & Jackson, J. H. (2000): Human Resource Management, 9th ed., Cincinnati, South-Western College Publishing. Buelens M.; Kreitner, R. & Kinicki A. (1999): Organizational Behaviour, London et al., McGraw-Hill. De George, Richard T. (1999): Business Ethics, Upper Saddle River, New Jersey. Baron, J. N.; Kreps, D. M. (1999): Strategic Human Resources, New York et al.
#Lehrformen	Lectures (2 SWS) and tutorials (2 SWS).
#Voraussetzung für die Teilnahme	No previous knowledge of business administration is required.
#Verwendbarkeit des Moduls	The cluster is particularly appropriate for the MBA IMRE Programme.
#Häufigkeit des Angebotes	All courses are taught once per academic year.
#Voraussetzung für Vergabe von Leistungspunkten	For each of the two courses within the cluster, final tests in written form (Human Resources & Organizational Behaviour: 120 minutes – Corporate Ethics: 90 minutes) have to be taken.
#Leistungspunkte	6
#Note	The overall mark for the cluster is computed as the average of the marks for each course.
#Arbeitsaufwand	The total time budgeted for the cluster is set at 180 hours, of which 60 hours are spent in class, the remaining 120 hours being spent on seminar sessions and the seminar paper.

<b>#Modul-Code</b>	EREMAP .MA.Nr.
<b>#Modulname</b>	Principles of Environmental Management
<b>#Verantwortlich</b>	<b>Name</b> Bongaerts <b>Vorname</b> Jan C. <b>Titel</b> Prof. Dr.
<b>#Dauer Modul</b>	Two semesters
<b>#Qualifikationsziel e/Kompetenzen</b>	Students learn the basic knowledge about environmental management, in particular at the level of (industrial) organisations. Contemporary leading principles, such as sustainability, prudent handling of energy and resources will be introduced. Students will have to apply the theoretical principles to practical problems of decision-making and management.
<b>#Inhalte</b>	The cluster gives an insight into the main and important issues of the management of resources and environment. All courses and related activities in the cluster belong together. There will be courses on (1) Environmental Economics & Management (EEM): Standards for management, ISO 14001, PCDA cycle, environmental aspects, environmental management manual, procedures, material safety data sheets, life cycle analysis. (2) Sustainability and Environmental Management (SEM): Definitions, principles of sustainable management, applications of principles by industrial companies, case studies. (3) Economics of resources (ER): Optimal control theory and depletable and renewable resources, population growth and resources, resources in a globalized world the resource curse.
<b>#Typische Fachliteratur</b>	Kolk, A. (2000): Economics of Environmental Management, Harlow Essex, Prentice Hall – Financial Times, Pearson Education; Turner, R. K.[editor] (1993): Sustainable environmental economics and management – principles and practice, London [et al.], Belhaven Pr; Conrad, J. M. (1999): Resource Economics, New York (et al.), Cambridge University Press.
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No previous knowledge and skills required.
<b>#Verwendbarkeit des Moduls</b>	The cluster is not only accessible to the MBA IMRE students but also to interested students of other programmes, such as engineering, geo-ecology.
<b>#Häufigkeit des Angebotes</b>	Every course within the cluster is taught once within an academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	For the completion of the course a test (60 Minuten) will have to be taken and a case study will have to be presented (10 Minuten).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The overall grade for the cluster is calculated as the arithmetic average of the grades of the individual tests.
<b>#Arbeitsaufwand</b>	The total time normally budgeted for the cluster is 270 hours, of which 90 hours are spent in class and the remaining 180 hours are spent on preparation and self-study.

<b>#Modul-Code</b>	SUSENMP .MA.Nr.
<b>#Modulname</b>	Sustainability & Environmental Management & Policy
<b>#Verantwortlich</b>	<b>Name Vorname Titel</b>
<b>#Dauer Modul</b>	1 semester
<b>#Qualifikationsziel e/Kompetenzen</b>	The purpose of the cluster is to introduce the concept of sustainability and its practical implementation.
<b>#Inhalte</b>	Sustainability and Environmental Management (SEM): Definitions, principles of sustainable management, applications of principles by industrial companies, case studies.
<b>#Typische Fachliteratur</b>	
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No previous knowledge and skills required.
<b>#Verwendbarkeit des Moduls</b>	The cluster is not only accessible to the MBA IMRE students but also to interested students of other programmes, such as engineering, geo-ecology.
<b>#Häufigkeit des Angebotes</b>	Every course within the cluster is taught once within an academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A written test of 90 minutes length will have to be taken.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the written test determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time normally budgeted for the cluster is 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on preparation and self-study.

#Modul-Code	EMA .MA.Nr.
#Modulname	Applied Environmental Management
#Verantwortlich	Name Bongaerts Vorname Jan C. Titel Prof. Dr.
#Dauer Modul	2 semesters
#Qualifikationsziel e/Kompetenzen	The purpose of the cluster is to give students the competences to understand practical problems associated with the management of resources from certain ecological viewpoints, such as waste, the environmental (and health risks) and the environmental impacts associated with the exploration, the extraction and the processing of natural resources.
#Inhalte	(1) Management of residuals (MOR): what is waste?, characteristics of waste legislation, waste legislation put to practice in management structures, case studies on waste management, environmental costing and waste, waste management and recycling, waste to energy. (2) Assessment and management of environmental risks with special attention to chemicals (ERA): environmental risk modelling, environmental risk management, instruments of environmental risk management, environmental risk and costing, case studies. (3) Environmental impact studies (EIS): purposes of environmental impact assessment, environmental impact study, phases of the environmental impact study, characteristics and elements of an environmental impact assessment, permitting process and procedures.
#Typische Fachliteratur	Asian Development Bank (1997/2003): Guidelines for the Economic Analysis of Projects, ADB, Manila; Behrens, W.; Hawranek, P.M. (1991): The Manual for the Preparation of Industrial Feasibility Studies, Unido Publication, Vienna; Fletcher, C. D.; Paleologos, E. K. (2000): Environmental risk and liability management for corporation and consultants, AIPG, Westminster (CO); SWA General Secretariat (2001): International Directory of Solid Waste Management 2000/2001 – The ISWA Yearbook, Earthscan; Kausch, P.; Ruhrmann, G. (2002): Environmental Management, Environmental Impact Assessment of Mining Operations. Logabook; Lerche, I.; Paleologos, E. K. (2001): Environmental Risk Analysis, McGraw-Hill, New York [et al.].
#Lehrformen	Lectures (2 SWS) and tutorials (2 SWS).
#Voraussetzung für die Teilnahme	Cluster Principles of Environmental & Resource Management.
#Verwendbarkeit des Moduls	The cluster and parts of it are not only accessible to the MBA IBDEM and IMRE students but also to interested students of other programmes, such as engineering, geo-ecology.
#Häufigkeit des Angebotes	Every course within the cluster is taught once within an academic year.
#Voraussetzung für Vergabe von Leistungspunkten	For the two courses within the cluster (MOR, ERA), papers of 15 pages length will have to be written
#Leistungspunkte	6
#Note	The overall grade for the cluster is calculated as the arithmetic

	average of the grades of the individual tests.
<b>#Arbeitsaufwand</b>	The total time normally budgeted for the cluster is 180 hours, of which 60 hours are spent in class and the remaining 120 hours are spent on preparation and self-study.

<b>#Code</b>	CASEMAN .BA.Nr.
<b>#Name</b>	Cases & Strategies in Environmental Management
<b>#Responsible</b>	<b>Name</b> Bongaerts <b>Vorname</b> Jan C. <b>Titel</b> Prof. Dr.
<b>#Duration</b>	Semester
<b>#Competencies</b>	The cluster intends to give students the knowledge and the ability to understand the business and the strategic choices and decision making processes of corporations in the environmental sectors. Moreover, they will have to work themselves through case studies in order to be able to gain practical knowledge of these issues.
<b>#Content</b>	Definitions, structure size and trends of the international environmental industry, frameworks of business in the sector, in particular within the string regulatory arrangement and the high environmental standards, globalisation of companies and local delivery of services.
<b>#Literature</b>	United Nations Development Programme; et al. [editor] (2005): World Resources 2005 – The Wealth of the Poor, World Resources Institute, New York. United Nations Development Programme; et al. (2004): World Resources 2002-04 – Decision for the earth: Balance, Voice, Power, World Resources Institute, New York.
<b>#Types of Teaching</b>	Teaching, seminars, individual course work and self-study, compilation of materials for presentations
<b>#Pre-requisites</b>	Admission to a graduate programme of the university (MBA IMRE or other Master's Programmes) or admission through Exchange programmes (e.g. ERASMUS)
<b>#Applicability</b>	The cluster and parts of it are not only accessible to the MBA IMRE students but also to interested students of other programmes, such as engineering, geo-ecology.
<b>#Frequency</b>	Both courses within the cluster are taught once within an academic year.
<b>#Requirements for credit points</b>	For completion of the cluster an oral exam of 20 minutes will have to be taken, and a presentation of 10 minutes and a paper of 10 pages will have to be prepared.
<b>#Credit points</b>	Within this cluster, 6 Credits can be awarded.
<b>#Grades</b>	The overall grade for the cluster is composed by taking the arithmetic average of the grades of the individual tests.
<b>#Amount of work</b>	The total calculated time effort for the Cluster is set at 180 hours, of which 60 hours are dedicated to class attendance and 120 hours are budgeted for self-study.

<b>#Code</b>	RECONEV .BA.Nr.
<b>#Name</b>	Resources Economics & Evaluation & Environmental Impact Studies
<b>#Responsible</b>	<b>Name</b> Bongaerts <b>Vorname</b> Jan C. <b>Titel</b> Prof. Dr.
<b>#Duration</b>	1 Semester
<b>#Competencies</b>	The cluster intends to give students the knowledge and the ability to understand the economic principles of resources and their usage as well as the methods and tools of an economic evaluation of natural resources. Moreover, the cluster is dedicated to the theme of assessing environmental impacts associated with the exploration, the extraction and the processing of natural resource
<b>#Content</b>	Economics of Resources (ER): Optimal control theory and depletable and renewable resources, population growth and resources, resources in a globalized world the resource curse. Strategies of the International Resource Industry (SIR): Structure and size of the international resources industry, setting objectives and developing long-term planning instruments, assessing performance through controlling instruments. Environmental impact studies (EIS): purposes of environmental impact assessment, environmental impact study, phases of the environmental impact study, characteristics and elements of an environmental impact assessment, permitting process and procedures.
<b>#Literature</b>	Conrad, J. M. (1999): Resource Economics, New York (et al.), Cambridge University Press. United Nations Development Programme; et al. [editor] (2005): World Resources 2005 – The Wealth of the Poor, World Resources Institute, New York. United Nations Development Programme; et al. (2004): World Resources 2002-04 – Decision for the earth: Balance, Voice, Power, World Resources Institute, New York. Kausch, P.; Ruhrmann, G. (2002): Environmental Management, Environmental Impact Assessment of Mining Operations. Logabook. Lerche, I.; Paleologos, E. K. (2001): Environmental Risk Analysis, McGraw-Hill, New York [et al.].
<b>#Types of Teaching</b>	Teaching, seminars, individual course work and self-study, compilation of materials for presentations
<b>#Pre-requisites</b>	Admission to a graduate programme of the university (MBA IMRE or other Master's Programmes) or admission through Exchange programmes (e.g. ERASMUS)
<b>#Applicability</b>	The cluster and parts of it are not only accessible to the MBA IMRE students but also to interested students of other programmes, such as engineering, geo-ecology.
<b>#Frequency</b>	Every course within the cluster is taught once within an academic year.
<b>#Requirements for credit points</b>	For completion of the cluster a paper of 15 pages length will have to be prepared, and a written test of 120 minutes length and a test of 90 minutes length will have to be taken.

<b>#Credit points</b>	Within this cluster, 9 Credits can be awarded.
<b>#Grades</b>	The overall grade for the cluster is composed by taking the arithmetic average of the grades of the individual tests.
<b>#Amount of work</b>	The total calculated time effort for the Cluster is set at 270 hours, of which 90 hours are dedicated to class attendance and 180 hours are budgeted for self-study.

<b>#Modul-Code</b>	CULSTU .MA.Nr.
<b>#Modulname</b>	Cultural studies
<b>#Verantwortlich</b>	Name Hinner Vorname Michael Titel Prof. Dr.
<b>#Dauer Modul</b>	2 semesters
<b>#Qualifikationsziel e/Kompetenzen</b>	The cluster enables students to relate to cultural and historical backgrounds. Many contemporary features of societies are base upon cultural characteristics and historical developments. Understanding these enables to understand and relate to societies of today. Practicing communication takes place in the shape of scholarly rhetoric. The historical developments dealt with in the cluster are specifically in the field of technology and ecology.
<b>#Inhalte</b>	(1) Recognizing the influence of their own culture on effective communicators in which they view themselves. Understanding how they became who they are and are less threatened by those of other backgrounds. Knowing more about the norms and values of other cultures. (2) This seminar focuses on improving essential academic writing and speaking skills in English. The seminar covers the following topics: academic style and ethics, research methodology, preparing outlines, formal syntax, paper content and layout, documenting sources, abstracts and summaries, thesis writing, holding professional presentations (3) The seminar on the history of environment offers an introduction to the development of environmental protection and technology.
<b>#Typische Fachliteratur</b>	Chen, G.-M., & Starosta, W. J. (2005): Foundations of Intercultural Communication. Lanham: University Press of America; Gudykunst, W. B., & Kim, Y.Y. (2003): Communicating with Strangers. Boston: McGraw Hill; Hinner, M. B. (2005): Introduction to Business Communication. Frankfurt/M: Peter Lang; Hinner, M. B. (2007): The Influence of Culture in the World of Business. Frankfurt/M: Peter Lang; Samovar, L. A., & Porter, R. E. (2004): Communication between Cultures. Belmont: Wadsworth/Thomson Learning; Worster, Donald (1997): Nature's economy. Cambridge; Worster, Donald (1993): The wealth of nature. New York, Oxford; Merchant, Carolyn (2001): The death of nature. San Francisco. Schama, Simon (1995): Landscape and memory. London; Mason, S. F. (1953): A history of the sciences. London.
<b>#Lehrformen</b>	Lectures (3 SWS) and tutorials (3 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No previous knowledge is required.
<b>#Verwendbarkeit des Moduls</b>	The cluster is offered to MBA IMRE students in the first place but it is also accessible to students of other courses.
<b>#Häufigkeit des Angebotes</b>	Each course of the cluster is taught once per year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	For completion of the cluster each of the three courses will have to be completed through following tests: For Scholarly Rhetoric a presentation of 10 minutes as well as a paper of 10 pages length will have to be written. For Intercultural Communication a presentation of 10 minutes and a written test of 90 minutes length

	will have to be taken. For History of Environment a presentation of 20 minutes, and a paper of 12 pages will have to be written.
<b>#Leistungspunkte</b>	9
<b>#Note</b>	The overall grade for the cluster is computed as the arithmetical average of the grades for the courses within the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 270 h, of which 90 h are spent in class and the remaining 180 h are spent on self-study.

<b>Modul-Code</b>	MTHESIS .MA.Nr.
<b>#Modulname</b>	Master Thesis IMRE including colloquium
<b>#Verantwortlich</b>	<b>Name</b> Bongaerts <b>Vorname</b> Jan C. <b>Titel</b> Professor
<b>#Dauer Modul</b>	One Semester
<b>#Qualifikationsziel e/Kompetenzen</b>	The student is supposed to elaborate a master thesis within a period of four months in order to prove that he/she is able to conduct research on a defined complex problem from a relevant area within a certain period of time. The problem shall be dealt with using and applying adequate scientific methods, and the whole research work including the results shall be described and illustrated in written and oral form.
<b>#Inhalte</b>	The topic of the master thesis can be chosen from the whole spectrum of research dealt with at TU Bergakademie Freiberg. The thesis work involves the elaboration of a concept for the project, the search for relevant literature, the acquirement and application of appropriate methods to fulfil the tasks of the thesis project, the conducting and assessing of practical and/or theoretical research, the discussion of results, the elaboration of the thesis, the public defending of the thesis in a colloquium of 20 minutes plus subsequent discussion.
<b>#Typische Fachliteratur</b>	
<b>#Lehrformen</b>	Self-study, guidance through supervisor(s).
<b>#Voraussetzung für die Teilnahme</b>	Completion of six clusters of required courses and one cluster of core electives.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for MBA IMRE students.
<b>#Häufigkeit des Angebotes</b>	Not applicable.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Positive evaluation through the supervisor(s), and successful defending of the thesis in a colloquium of 20 minutes.
<b>#Leistungspunkte</b>	18
<b>#Note</b>	The overall grade for the cluster is computed of the grade for the thesis (weighting 75%) and the grade for colloquium (weighting 25%).
<b>#Arbeitsaufwand</b>	The total calculated time effort for the Cluster is set at 400 hours, all of which are spent for self-study and discussion with the supervisor.

<b>#Modul-Code</b>	DEUG1A .BA.Nr.
<b>#Modulname</b>	Deutsch Grundstufe 1 A
<b>#Verantwortlich</b>	<b>Name</b> Keßler <b>Vorname</b> Gisela <b>Titel</b>
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Im Kurs werden Grundlagen in Phonetik, Orthographie, Grammatik und Lexik vermittelt. Die Teilnehmer erwerben Grundkenntnisse und Grundfertigkeiten im Hören, Sprechen, Lesen und Schreiben auf der Basis der Allgemeinsprache sowie landeskundliche Kenntnisse.
<b>#Inhalte</b>	Kommunikation im Alltag (Menschen kennen lernen, Einkaufen, Restaurantbesuch, Tagesabläufe, Uhrzeit); Grammatik: z.B. Fragestellungen, Zahlen, Konjugation der Verben, Präsenz und Präteritum, Mengenangaben, Plural der Nomen, Komposita
<b>#Typische Fachliteratur</b>	Berliner Platz, Band 1, Langenscheidt
<b>#Lehrformen</b>	Übung (4 SWS)
<b>#Voraussetzung für die Teilnahme</b>	keine Vorkenntnisse der deutschen Sprache notwendig
<b>#Verwendbarkeit des Moduls</b>	Der Kurs ist geeignet für ausländische Austauschstudenten, Studenten in englischsprachigen Studiengängen und Doktoranden.
<b>#Häufigkeit des Angebotes</b>	Beginn jährlich zum Wintersemester
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Die Modulprüfung besteht aus einer Klausurarbeit im Umfang von 90 Minuten, die bestanden werden muss. Prüfungsvorleistung ist die erfolgreiche Teilnahme am Unterricht (mind. 80%).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	Die Modulnote ergibt sich aus der Note der Klausurarbeit.
<b>#Arbeitsaufwand</b>	Der Zeitaufwand beträgt 90 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit (4 SWS) und 30 Stunden Selbststudium. Letzteres umfasst die Vor- und Nachbereitung von Lehrveranstaltungen sowie die Vorbereitung auf die Klausurarbeit.

<b>#Modul-Code</b>	DEUG1B .BA.Nr.
<b>#Modulname</b>	Deutsch Grundstufe 1 B
<b>#Verantwortlich</b>	<b>Name</b> Keßler <b>Vorname</b> Gisela <b>Titel</b>
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Im Kurs werden Grundlagen in Phonetik, Orthographie, Grammatik und Lexik vermittelt. Die Teilnehmer erwerben Grundkenntnisse und Grundfertigkeiten im Hören, Sprechen, Lesen und Schreiben auf der Basis der Allgemeinsprache sowie landeskundliche Kenntnisse.
<b>#Inhalte</b>	Orientierung in der Stadt bzw. in der Firma, Öffentliche Verkehrsmittel, Wegbeschreibung, Berufe und Arbeitsalltag, Körper- und Gesundheit, Wohnungssuche und –einrichtung, Lebenslauf, Kleidung; Grammatik: z.B. Präpositionen, Frageartikel, Modalverben, Possessivartikel, Perfekt, Konjunktionen, Demonstrativpronomen, Graduierung und Komparativ
<b>#Typische Fachliteratur</b>	Berliner Platz, Band 1, Langenscheidt
<b>#Lehrformen</b>	Übung (4 SWS)
<b>#Voraussetzung für die Teilnahme</b>	Erfolgreicher Abschluss des Moduls Deutsch Grundstufe 1 A oder äquivalente Sprachkenntnisse
<b>#Verwendbarkeit des Moduls</b>	Der Kurs ist geeignet für ausländische Austauschstudenten, Studenten in englischsprachigen Studiengängen und Doktoranden.
<b>#Häufigkeit des Angebotes</b>	Beginn jährlich zum Sommersemester
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Die Modulprüfung besteht aus einer Klausurarbeit im Umfang von 90 Minuten, die bestanden werden muss. Prüfungsvorleistung ist die erfolgreiche Teilnahme am Unterricht (mind. 80%).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	Die Modulnote ergibt sich aus der Note der Klausurarbeit.
<b>#Arbeitsaufwand</b>	Der Zeitaufwand beträgt 90 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit (4 SWS) und 30 Stunden Selbststudium. Letzteres umfasst die Vor- und Nachbereitung von Lehrveranstaltungen sowie die Vorbereitung auf die Klausurarbeit.

<b>#Modul-Code</b>	DEUG2A
<b>#Modulname</b>	Deutsch Grundstufe 2 A
<b>#Verantwortlich</b>	<b>Name</b> Keßler <b>Vorname</b> Gisela <b>Titel</b>
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Die Teilnehmer erweitern ihre Kenntnisse zu Grundlagen der deutschen Grammatik sowie ihren allgemeinsprachlichen Wortschatz und führen Gespräche zu verschiedenen Themen des Alltags.
<b>#Inhalte</b>	Familie und Verwandtschaft, Feste und Feiern in Deutschland, Wohnung und Wohnungseinrichtung, Schule und Ausbildung, Aussehen und Mode, Jahreszeiten, Wetter und Urlaub, Aspekte der Geschichte (Deutschland, Österreich, Schweiz); Grammatik: z.B. Nebensätze mit weil, wenn, dass; Rektion der Verben; Ordinalzahlen; Präpositionen; Reflexivpronomen; Zukunft ausdrücken; Adjektivdeklination
<b>#Typische Fachliteratur</b>	Berliner Platz, Band 2, Langenscheidt
<b>#Lehrformen</b>	Übung (4 SWS)
<b>#Voraussetzung für die Teilnahme</b>	Erfolgreicher Abschluss des Moduls Deutsch Grundstufe 1 B oder äquivalente Sprachkenntnisse
<b>#Verwendbarkeit des Moduls</b>	Der Kurs ist geeignet für ausländische Austauschstudenten, Studenten in englischsprachigen Studiengängen und Doktoranden.
<b>#Häufigkeit des Angebotes</b>	Beginn jährlich zum Wintersemester
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Die Modulprüfung besteht aus einer Klausurarbeit im Umfang von 60 Minuten, die bestanden werden muss. Prüfungsvorleistung ist die erfolgreiche Teilnahme am Unterricht (mind. 80%).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	Die Modulnote ergibt sich aus der Note der Klausur.
<b>#Arbeitsaufwand</b>	Der Zeitaufwand beträgt 90 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit (4 SWS) und 30 Stunden Selbststudium. Letzteres umfasst die Vor- und Nachbereitung von Lehrveranstaltungen sowie die Vorbereitung auf die Klausur.

<b>#Modul-Code</b>	DEUG2B .BA.Nr.
<b>#Modulname</b>	Deutsch Grundstufe 2 B
<b>#Verantwortlich</b>	<b>Name</b> Keßler <b>Vorname</b> Gisela <b>Titel</b>
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Die Teilnehmer erweitern ihre Kenntnisse zu Grundlagen der deutschen Grammatik sowie ihren allgemeinsprachlichen Wortschatz und führen Gespräche zu verschiedenen Themen des Alltags.
<b>#Inhalte</b>	Freizeitaktivitäten (Sport, Vereine), Arbeit und Arbeitssuche, Politik in Deutschland, Städte (Leipzig, Berlin), Verkehr und Verkehrsmittel, Medien, Fernsehen in Deutschland, Kulturelle Unterschiede; Grammatik: z.B. Indefinita, Relativsätze, Nebensätze mit bevor, bis, als, deshalb, wenn, Konjunktiv II,
<b>#Typische Fachliteratur</b>	Berliner Platz, Band 2, Langenscheidt
<b>#Lehrformen</b>	Übung (4 SWS)
<b>#Voraussetzung für die Teilnahme</b>	Erfolgreicher Abschluss des Moduls Deutsch Grundstufe 2 A oder äquivalente Sprachkenntnisse
<b>#Verwendbarkeit des Moduls</b>	Der Kurs ist geeignet für ausländische Austauschstudenten, Studenten in englischsprachigen Studiengängen und Doktoranden.
<b>#Häufigkeit des Angebotes</b>	Beginn jährlich zum Sommersemester
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Die Modulprüfung besteht aus einer Klausurarbeit im Umfang von 60 Minuten, die bestanden werden muss. Prüfungsvorleistung ist die erfolgreiche Teilnahme am Unterricht (mind. 80%).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	Die Modulnote ergibt sich aus der Note der Klausurarbeit.
<b>#Arbeitsaufwand</b>	Der Zeitaufwand beträgt 90 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit (4 SWS) und 30 Stunden Selbststudium. Letzteres umfasst die Vor- und Nachbereitung von Lehrveranstaltungen sowie die Vorbereitung auf die Klausurarbeit.

<b>#Modul-Code</b>	DEUMITA .BA.Nr.
<b>#Modulname</b>	Deutsch Mittelstufe A
<b>#Verantwortlich</b>	<b>Name Keßler Vorname Gisela Titel</b>
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Die Teilnehmer bauen die in den Modulen Deutsch Grundstufe 1 und 2 erworbenen sprachlichen Kenntnisse und Fertigkeiten unter besonderer Berücksichtigung der mündlichen Kommunikation aus. Sie wiederholen und erweitern ihren Wortschatz. Auf der Basis aktueller und historischer Texte erhalten die Teilnehmer landeskundliche Informationen über die Bundesrepublik Deutschland.
<b>#Inhalte</b>	Zusammenleben der Menschen in Deutschland (Wohn- und Lebensformen, Vorstellungen über berufliche Entwicklung und Freizeitgestaltung, Konsumverhalten, Beziehung zur Natur)
<b>#Typische Fachliteratur</b>	Aspekte, Mittelstufe Deutsch, Langenscheidt Verlag
<b>#Lehrformen</b>	Übung (4 SWS)
<b>#Voraussetzung für die Teilnahme</b>	Erfolgreicher Abschluss des Moduls Deutsch Grundstufe 2 B oder äquivalente Sprachkenntnisse
<b>#Verwendbarkeit des Moduls</b>	Der Kurs ist geeignet für ausländische Austauschstudenten, Studenten in englischsprachigen Studiengängen und Doktoranden.
<b>#Häufigkeit des Angebotes</b>	Beginn jährlich zum Wintersemester
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Die Modulprüfung besteht aus einer Klausurarbeit im Umfang von 60 Minuten, die bestanden werden muss. Prüfungsvorleistung ist die erfolgreiche Teilnahme am Unterricht (mind. 80%).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	Die Modulnote ergibt sich aus der Note der Klausurarbeit.
<b>#Arbeitsaufwand</b>	Der Zeitaufwand beträgt 90 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit (4 SWS) und 30 Stunden Selbststudium. Letzteres umfasst die Vor- und Nachbereitung von Lehrveranstaltungen sowie die Vorbereitung auf die Klausurarbeit.

<b>#Modul-Code</b>	DEUMITB
<b>#Modulname</b>	Deutsch Mittelstufe B
<b>#Verantwortlich</b>	<b>Name Keßler Vorname Gisela Titel</b>
<b>#Dauer Modul</b>	1 Semester
<b>#Qualifikationsziele/ Kompetenzen</b>	Die Teilnehmer bauen die in den Modulen Deutsch Grundstufe 1 und 2 erworbenen sprachlichen Kenntnisse und Fertigkeiten unter besonderer Berücksichtigung der mündlichen Kommunikation aus. Sie wiederholen und erweitern ihren Wortschatz. Auf der Basis aktueller und historischer Texte erhalten die Teilnehmer landeskundliche Informationen über die Bundesrepublik Deutschland.
<b>#Inhalte</b>	Zusammenleben der Menschen in Deutschland (Wohn- und Lebensformen, Vorstellungen über berufliche Entwicklung und Freizeitgestaltung, Konsumverhalten, Beziehung zur Natur)
<b>#Typische Fachliteratur</b>	Aspekte, Mittelstufe Deutsch, Langenscheidt Verlag
<b>#Lehrformen</b>	Übung (4 SWS)
<b>#Voraussetzung für die Teilnahme</b>	Erfolgreicher Abschluss des Moduls Deutsch Mittelstufe A oder äquivalente Sprachkenntnisse
<b>#Verwendbarkeit des Moduls</b>	Der Kurs ist geeignet für ausländische Austauschstudenten, Studenten in englischsprachigen Studiengängen und Doktoranden.
<b>#Häufigkeit des Angebotes</b>	Beginn jährlich zum Sommersemester
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	Die Modulprüfung besteht aus einer Klausurarbeit im Umfang von 60 Minuten, die bestanden werden muss. Prüfungsvorleistung ist die erfolgreiche Teilnahme am Unterricht (mind. 80%).
<b>#Leistungspunkte</b>	3
<b>#Note</b>	Die Modulnote ergibt sich aus der Note der Klausurarbeit.
<b>#Arbeitsaufwand</b>	Der Zeitaufwand beträgt 90 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit (4 SWS) und 30 Stunden Selbststudium. Letzteres umfasst die Vor- und Nachbereitung von Lehrveranstaltungen sowie die Vorbereitung auf die Klausurarbeit.

<b>#Modul-Code</b>	MINING .MA.Nr.
<b>#Modulname</b>	Introduction to Mining
<b>#Verantwortlich</b>	<b>Name</b> Drebenstedt <b>Vorname</b> Carsten <b>Titel</b> Prof. Dr.
<b>#Dauer Modul</b>	One Semester
<b>#Qualifikationsziel e/Kompetenzen</b>	Basic knowledge in role of mining and mining engineering processes and relationship to other disciplines; Understanding of sustainable development in mining industry: balance between mining production, social development and environment protection
<b>#Inhalte</b>	Mining is one of the oldest and most important sectors in our civilisation building the backbone of many further industries. Developed economies highly dependent on mineral and energy imports. The world knows many wars about reserves and resources. Mining production employs million of workers worldwide and is especially in developing countries an important source of income. On other side mining has a great influence to the environment and social sphere. Mining is today a modern industry with high standard in working safety and environment protection. The largest machines the world knows are operating in open pit mines. The lecture introduces this interesting and important world of mining and gives an understanding for economic, social and technical processes. Case studies will illustrate the practical side of knowledge application.
<b>#Typische Fachliteratur</b>	
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No requirements.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for the MBA IMRE Programme.
<b>#Häufigkeit des Angebotes</b>	The course is taught once per academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A final test in written form of 90 minutes will have to be taken.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the exam determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

<b>#Modul-Code</b>	OREDEP .MA.Nr.
<b>#Modulname</b>	Ore Deposits & Economic Geology
<b>#Verantwortlich</b>	<b>Name Seifert Vorname Thomas Titel Dr.</b>
<b>#Dauer Modul</b>	One Semester
<b>#Qualifikationsziel e/Kompetenzen</b>	Offering engineers and non-geoscientists the opportunity to get some background knowledge on the genesis of ore deposits and resulting implications for exploration and processing.
<b>#Inhalte</b>	An introduction to ore-forming environments. Major case studies of ore deposits will also be discussed. An integral part of the course is the study of hand specimen.
<b>#Typische Fachliteratur</b>	Evans, A. M. (1993). Ore Geology and Industrial Minerals, Oxford: Blackwell. Guilbert, J.M. and Park, C.F. (1986). The Geology of Ore Deposits, New York: Freeman. Kesler, E. (1994) Mineral Resources, Economics and the Environment, New York: Macmillan.
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No requirements.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for the MBA IMRE Programme.
<b>#Häufigkeit des Angebotes</b>	The course is taught once per academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A final test in written form of 90 minutes will have to be taken.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the exam determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

<b>#Modul-Code</b>	OIGACO .MA.Nr.
<b>#Modulname</b>	Oil, Gas, & Coal
<b>#Verantwortlich</b>	<b>Name</b> Volkmann <b>Vorname</b> Norbert <b>Titel</b> Prof. Dr.
<b>#Dauer Modul</b>	One Semester
<b>#Qualifikationsziel e/Kompetenzen</b>	The course provides an introduction into the formation of fossil fuels. In particular , it imparts an understanding of the fundamentals of the process, i.e. sedimentation of organic material, formation of peat, and oil-/gas source rocks, the maturity of organic material and possibilities of investigation, the burial history of oil, gas, and coal, a basic knowledge of oil, gas, and coal deposits, its characterization and exploration.
<b>#Inhalte</b>	Basic course in coal, natural gas, and oil geology.
<b>#Typische Fachliteratur</b>	Stach, E. et al. (o.J.). STACH`S Textbook of coal petrology, Berlin / Stuttgart: Gebr. Borntraeger. Taylor, G.H. (1998). Organic petrology, Berlin / Stuttgart: Gebr. Borntraeger. Thomas, L. (1992). Handbook of practical coal geology, Chichester: John Wiley & Sons. Welte, D.H. (1997). Petroleum and basin evolution: insights from petroleum geochemistry, geology and basin modelling, Berlin [et al.]: Springer.
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No requirements.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for the MBA IMRE Programme.
<b>#Häufigkeit des Angebotes</b>	The course is taught once per academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A final test in written form of 90 minutes will have to be taken.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the exam determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

<b>#Modul-Code</b>	PROCENG .MA.Nr.
<b>#Modulname</b>	Process Engineering
<b>#Verantwortlich</b>	<b>Name</b> Wollenberg <b>Vorname</b> Ralph <b>Titel</b> Dr.
<b>#Dauer Modul</b>	One Semester
<b>#Qualifikationsziel e/Kompetenzen</b>	<p>The students should</p> <ul style="list-style-type: none"> <li>▪ acquire the ability to understand the meaning of process engineering for utilizing natural resources in an economically effective and ecologically compatible way,</li> <li>▪ learn to use the mathematical method of balancing for designing and evaluating technical systems,</li> <li>▪ be able to select suitable particulate control techniques depending on dust properties and to use balancing methods for determining the separation efficiency.</li> </ul>
<b>#Inhalte</b>	The lecture offers an understanding of basics in the field of process engineering with special emphasis on air pollution control techniques. After dealing with some basic ideas, terms and definitions related to process engineering the subject of balancing is in focus. Balancing is a very important tool for developing, optimizing and evaluating technical processes. Due to its importance in the area of environmental protection the fundamentals of particulate control techniques as a special domain of process engineering is a further topic. The active principles of technical dust collection systems, the diverse dust collectors and the application of balancing methods for determining the separation efficiency are explained.
<b>#Typische Fachliteratur</b>	Luyben, William L. (1988): Chemical process analysis: mass and energy balances, Prentice Hall. Theodore, L. & Buonicore, A. (1994): Air pollution control equipment, Springer-Verlag.
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No requirements.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for the MBA IMRE Programme.
<b>#Häufigkeit des Angebotes</b>	The course is taught once per academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A final test in written form of 90 minutes will have to be taken.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the exam determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

#Modul-Code	ECOSYS .MA.Nr.
#Modulname	Ecosystems
#Verantwortlich	Name Heilmeier Vorname Hermann Titel PD Dr.
#Dauer Modul	One Semester
#Qualifikationsziel e/Kompetenzen	<p>The aims of the lecture are:</p> <ul style="list-style-type: none"> <li>▪ understanding of major processes in ecosystems on physical, chemical and biological basics;</li> <li>▪ competence for ad hoc evaluation of fundamental anthropogenic disturbances of ecosystem components, processes and services;</li> <li>▪ ability for stimulating management practices orientated towards a sustainable utilization of (semi-) natural and human-dominated ecosystems.</li> </ul>
#Inhalte	The lecture "Ecosystems" gives an overview on principles of ecosystem structures and functions, based on fundamental scientific knowledge from physics, chemistry and biology. Following the description of energy flows and nutrient cycles and ecosystem services, major human impacts on ecosystems and different management practices are introduced.
#Typische Fachliteratur	
#Lehrformen	Lectures (1 SWS) and tutorials (1 SWS).
#Voraussetzung für die Teilnahme	No requirements.
#Verwendbarkeit des Moduls	The cluster is particularly appropriate for the MBA IMRE Programme.
#Häufigkeit des Angebotes	The course is taught once per academic year.
#Voraussetzung für Vergabe von Leistungspunkten	A final test in written form of 90 minutes will have to be taken.
#Leistungspunkte	3
#Note	The grade earned in the exam determines the overall grade for the cluster.
#Arbeitsaufwand	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

<b>#Modul-Code</b>	MATSCI .MA.Nr.
<b>#Modulname</b>	Material Sciences
<b>#Verantwortlich</b>	<b>Name</b> Seifert <b>Vorname</b> Hans <b>Titel</b> Prof. Dr.
<b>#Dauer Modul</b>	One Semester
<b>#Qualifikationsziel e/Kompetenzen</b>	Qualification for cooperation with engineers.
<b>#Inhalte</b>	The lectures deal with the basics of materials science (structure, classes of materials), the main properties and the application of materials.
<b>#Typische Fachliteratur</b>	Askeland, D.R., The Science and Engineering of Materials, Chapman and Hall, London etc. Schatt, W.; Worch, H., Werkstoffwissenschaft, Deutscher Verlag für Grundstoffindustrie. W. D. Callister, jr. Materials Science and Engineering – An Introduction, New York etc.: John Wiley & Sons. Inc.
<b>#Lehrformen</b>	Lectures (1 SWS) and tutorials (1 SWS).
<b>#Voraussetzung für die Teilnahme</b>	No requirements.
<b>#Verwendbarkeit des Moduls</b>	The cluster is particularly appropriate for the MBA IMRE Programme.
<b>#Häufigkeit des Angebotes</b>	The course is taught once per academic year.
<b>#Voraussetzung für Vergabe von Leistungspunkten</b>	A final test in written form of 90 minutes will have to be taken.
<b>#Leistungspunkte</b>	3
<b>#Note</b>	The grade earned in the exam determines the overall grade for the cluster.
<b>#Arbeitsaufwand</b>	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

#Modul-Code	GEOECO .MA.Nr.
#Modulname	Geo-Ecology
#Verantwortlich	Name Matschullat Vorname Jörg Titel Prof. Dr.
#Dauer Modul	One Semester
#Qualifikationsziel e/Kompetenzen	Basic understanding of processes in atmosphere, pedosphere, hydrosphere, lithosphere, and biosphere; of global, regional, and local cycles of elements and matter; of the interaction and interdependencies between those cycles, and of a scientific discussion in English and information retrieval from libraries and the internet.
#Inhalte	A comprehensive lecture on the basic principles and processes of our Earth system. This lecture is accompanied by an exercise where the participants gather information and write a short thesis on a selected topic, thus applying the freshly learned knowledge.
#Typische Fachliteratur	Berner E. K., Berner R. A. (1996): Global environment. Water, Air and Geochemical Cycles, Prentice Hall. Ernst W. G. (Ed.) (2000): Earth Systems. Processes and Issues, Cambridge University Press. Murck B. W., Skinner B. J. & Porter S. C. (1996): Environmental Geology, John Wiley & Sons.
#Lehrformen	Lectures (1 SWS) and tutorials (1 SWS).
#Voraussetzung für die Teilnahme	No requirements.
#Verwendbarkeit des Moduls	The cluster is particularly appropriate for the MBA IMRE Programme.
#Häufigkeit des Angebotes	The course is taught once per academic year.
#Voraussetzung für Vergabe von Leistungspunkten	A final test in written form of 90 minutes will have to be taken.
#Leistungspunkte	3
#Note	The grade earned in the exam determines the overall grade for the cluster.
#Arbeitsaufwand	The total time budgeted for the cluster is set at 90 hours, of which 30 hours are spent in class and the remaining 60 hours are spent on self-study.

#Modul-Code	INTLAW2 .MA.Nr.
#Modulname	Aspects of the International Law of Resources & Environment 2
#Verantwortlich	Name Wolf Vorname Rainer Titel Prof. Dr.
#Dauer Modul	One Semester
#Qualifikationsziel e/Kompetenzen	The purpose of the cluster is to give an introduction to the basic terms of law and to legal problems related to resources and environment in international law. Students without a law background will be enabled to understand the characteristics of these fields as such, before turning to a range of more specific questions. After completion of the cluster, students should be able to identify the legal issues of simple cases in the fields of law discussed and to decide on them using the established legal methods.
#Inhalte	Subject of the course are two topics. 1. EU and Its Environment Policy: Students should gain a basic knowledge of the law-making process in the EU and the characteristics of different types of legal measures. This knowledge shall then be applied to the EU environment policy and some of its fields as waste management and environmental impact assessment. 2. Individuals and Companies: The principles of the law of contract and the law of torts will be explained, and specific areas of importance for the management of resources and environment like codes of conduct will be dealt with.
#Typische Fachliteratur	Folsom, R. H. (2005): European Union Law, 5 <sup>th</sup> ed.; Clarkson, C.M.V.; Hill, J. (2006): Conflict of Laws, 3 <sup>rd</sup> ed.; Gordley, J. (2006): Foundations of Private Law: Property, Tort, Contract, Unjust Enrichment.
#Lehrformen	Lectures (1 SWS) and tutorials (1 SWS).
#Voraussetzung für die Teilnahme	Successful participation of the mandatory cluster International Law of Resources & Environment 1.
#Verwendbarkeit des Moduls	The cluster is primarily intended for students of the MBA IMRE Programme, but it is also open to all other students.
#Häufigkeit des Angebotes	The course is taught once per academic year in summer term.
#Voraussetzung für Vergabe von Leistungspunkten	A written test of 90 minutes length will have to be taken.
#Leistungspunkte	3
#Note	The mark for the cluster is equivalent to the mark of the examination in the mandatory part.
#Arbeitsaufwand	The total time budgeted for the cluster is set at 90 hours, of which 60 hours are spent in class and the remaining 30 hours are spent on self-study. Self-studies include assignments, preparation and wrapping up of lectures as well as preparation of examinations.

<b>#Code</b>	INTSHIP .BA.Nr.
<b>#Name</b>	Internship
<b>#Responsible</b>	<b>Name</b> Bongaerts <b>Vorname</b> Jan C. <b>Titel</b> Prof. Dr.
<b>#Duration</b>	1 Semester
<b>#Competencies</b>	The objective of internship that is offered as an elective is to allow students applying the knowledge acquired during their studies in practice.
<b>#Content</b>	Not applicable.
<b>#Literature</b>	Not applicable.
<b>#Types of Teaching</b>	Partical training
<b>#Pre-requisites</b>	No requirements.
<b>#Applicability</b>	The cluster is particularly appropriate for the elective part of the MBA IMRE Programme.
<b>#Frequency</b>	Not applicable.
<b>#Requirements for credit points</b>	Approval of the examination committee of IMRE that the internship is sufficient to substitute two elective courses, a written report on the internship with a length of 15 pages, and an internship certificate issued by the company/organization.
<b>#Credit points</b>	6
<b>#Grades</b>	The grade derives from the grade for the internship report.
<b>#Amount of work</b>	The total time budgeted for the cluster is set at 180 hours, all of which are spent as an intern in a company or organization.

Freiberg, den 18.01.2008

gez.:

Prof. Dr.-Ing. Georg Unland