

Amtliche Bekanntmachungen der TU Bergakademie Freiberg

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Modulhandbuch für den Masterstudiengang International Business and Resources in Emerging Markets (IBRE)

Inhaltsverzeichnis

| | |
|---|----|
| Abkürzungen | 3 |
| Business Communication | 4 |
| Classifying Machines, Crushers, Mills | 6 |
| Climate Change Economics | 7 |
| Competition Policy and Intellectual Property Rights | 8 |
| Corporate Finance | 10 |
| Decision Support Systems | 11 |
| Deutsch A1/ 1. Semester | 13 |
| Deutsch A1/ 2. Semester | 14 |
| Deutsch A2/ 1. Semester | 15 |
| Deutsch A2/ 2. Semester | 16 |
| Deutsch B1/ 1.Semester | 17 |
| Deutsch B1/ 2. Semester | 18 |
| Deutsch B2/ 2. Semester | 19 |
| Economic Theory: Macro-Economics | 20 |
| Economic Theory: Micro-Economics | 21 |
| Ecosystems | 22 |
| Environmental Management and Policies | 23 |
| Finance in Developing and Emerging Countries: A Historical and Evolutionary Perspective | 24 |
| Fundamentals of Crystallography | 25 |
| Fundamentals of Plastic Deformation | 26 |
| Geomodelling – Geostatistics for Natural Resource Modelling | 27 |
| Ground Water Chemistry for GW-Management - Basics | 29 |
| History of the Environment | 31 |
| Human Resource Management and Organizational Behavior (HRMOB) | 32 |
| Hydrogeology for GW-Management - Basics | 34 |
| Information Management | 36 |
| International Business and Management | 38 |
| International Development and Resources | 40 |
| International Marketing | 42 |
| Internship [IBRE] | 43 |
| Introduction to Mining | 44 |
| Master Thesis [MBA IBRE] | 45 |
| Material Flow Analysis and Life Cycle Assessment | 46 |
| Materials Handling | 48 |
| Materials Science | 49 |
| Methods of Analysis and Econometrics | 50 |
| Multicultural Communication, Language and Rhetoric | 52 |
| Operations Management | 54 |
| Ore Deposits & Economic Geology | 55 |
| Organizational Communication | 56 |
| Project Management | 58 |
| Reclamation | 60 |
| Resource Management | 62 |
| Selective Separation of Strategic Elements | 64 |
| Strategies of the Resource Industry | 65 |
| Supply Chain Management | 67 |
| Thermodynamics and Heat Transfer | 68 |
| Training in Particle Technology | 69 |

Abkürzungen

KA: schriftliche Klausur / written exam

MP: mündliche Prüfung / oral examination

AP: alternative Prüfungsleistung / alternative examination

PVL: Prüfungsvorleistung / prerequisite

MP/KA: mündliche oder schriftliche Prüfungsleistung (abhängig von Teilnehmerzahl) / written or oral examination (dependent on number of students)

SS, SoSe: Sommersemester / sommer semester


WS, WiSe: Wintersemester / winter semester


SX: Lehrveranstaltung in Semester X des Moduls / lecture in module semester x

SWS: Semesterwochenstunden

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|---------------------------------|---|---------------------|-----------------------|
| Data: | BUSCOMM. MA. Nr. 409 / Examination number: 60704 | Version: 14.02.2017 | Start Year: WiSe 2012 |
| Module Name: | Business Communication | | |
| (English): | | | |
| Responsible: | Hinner, Michael B. / Prof. Dr. | | |
| Lecturer(s): | Hinner, Michael B. / Prof. Dr. | | |
| Institute(s): | Professor of Business English, Business Communication and Intercultural Communication | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The module seeks to transmit the theoretical foundation for human communication principles and applies them in a business context to illustrate and analyze how communication influences, directs, and determines business transactions and relationships in, for example, the resource industry, engineering firms, global corporations, etc. | | |
| Contents: | <p>The module consists of one lecture and one tutorial and is structured as follows:</p> <ol style="list-style-type: none"> 1. The lecture focuses on the following topics: Communication, communication models, perceptual process, communication channels and media, communication context, meaning, encoding and decoding, feedback analysis, verbal and nonverbal communication, business and communication. 2. The tutorial integrates the above topics into an applied business context (e.g. the resource industry, engineering firms, global corporations, etc.). Participants will analyze and discuss the topics and contexts in small groups and present the results informally and formally. The module is taught in English and assignments have to be completed in English. | | |
| Literature: | <p>Adler, R. B., Rodman, G. R., & DuPré, A. (2014). Understanding Human Communication (12th Edition). New York: Oxford University Press. Hinner, M.B., Ed. (2007, 2010). Freiburger Beiträge zur interkulturellen und Wirtschaftskommunikation, Volume 3 and 6. Frankfurt am Main: Peter Lang.</p> | | |
| Types of Teaching: | <p>S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (2 SWS)</p> | | |
| Pre-requisites: | Recommendations: Abitur-level English, or equivalent knowledge of English. | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: KA* [90 min] AP*: Active participation, as well as assignments in the module.</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA* [90 min] AP*: Aktive Teilnahme, sowie Belegarbeiten in der Veranstaltung</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> | | |
| Credit Points: | 6 | | |


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| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA* [w: 4]</p> <p>AP*: Active participation, as well as assignments in the module. [w: 1]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | <p>The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-study time includes reading the relevant literature, preparation and follow-up work for in-class participation as well as preparation time for the written exam, i.e. "Klausurarbeit" and the assignments.</p> |

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|---------------------------------|--|--|-----------------------|
| Data: | CMCRMI. MA. Nr. 3626 / Examination number: 42810 | Version: 19.09.2017  | Start Year: WiSe 2019 |
| Module Name: | Classifying Machines, Crushers, Mills | | |
| (English): | | | |
| Responsible: | Lieberwirth, Holger / Prof. Dr.-Ing. | | |
| Lecturer(s): | Meltke, Klaus / Dr.-Ing. | | |
| Institute(s): | Institute of Mineral Processing Machines | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The students will be enabled to select, calculate and design classifying machines, crushers and mills according to the specific requirements of their applications. | | |
| Contents: | Planning and design of classifying machines, crushers and mills (Static, Vibrating and Drum Screens, Cyclons and Air Separators; Jaw, Double Roll, Cone, Gyratory, Hammer and Impact Crushers; Tumbling, High Pressure Grinding, Vertical Roller, Vibrating, Stirred Media, Impact, Beater and Jet Mills) | | |
| Literature: | Wills, B.A.; Napier-Munn, T.J.: Mineral Processing Technology, Elsevier, 2007 Gupta, A.; Yan, D.: Mineral Processing, Design and Operations, Elsevier, 2016 Metso: Crushing and Screening Handbook, 2006 Höfl, K.: Zerkleinerungs- und Klassiermaschinen, Dt. Verlag für Grundstoffindustrie, Leipzig 1985 | | |
| Types of Teaching: | S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (1 SWS) S1 (WS): Experimental trainings, exercises and a design exercise. / Practical Application (1 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: MP/KA (KA if 10 students or more) [MP minimum 30 min / KA 90 min] PVL: At least 90% of the exercises are completed successfully (protocols). PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: MP/KA (KA bei 10 und mehr Teilnehmern) [MP mindestens 30 min / KA 90 min] PVL: Mindestens 90 % der Praktika und Übungen erfolgreich absolviert (Protokolle). PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 5 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): MP/KA [w: 1] | | |
| Workload: | The workload is 150h. It is the result of 60h attendance and 90h self-studies. The latter includes the preparation and preparation of the exercises, experimental trainings and preparation for the examination. | | |

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|---------------------------------|---|--|-----------------------|
| Data: | CCE. MA. / Examination number: 60319 | Version: 23.01.2020  | Start Year: SoSe 2017 |
| Module Name: | Climate Change Economics | | |
| (English): | | | |
| Responsible: | Rübbelke, Dirk / Prof. Dr. | | |
| Lecturer(s): | Rübbelke, Dirk / Prof. Dr. | | |
| Institute(s): | Professor of Economics, esp. Resource Economics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students will be able to understand the key aspects of climate change economics. National as well as international issues will be covered. | | |
| Contents: | Among the topics are the economics of adaptation to and mitigation of climate change, international negotiations, climate finance. | | |
| Literature: | <p>Buchholz, W., & Rübbelke, D. (2019). Foundations of Environmental Economics. Springer Texts in Business and Economics.</p> <p>Gintis, H. (2009). Game Theory Evolving: A Problem-Centered Introduction to Modeling Strategic Interaction. Princeton University Press.</p> <p>Perman, R. et al. (2011), Natural Resource & Environmental Economics, Pearson.</p> <p>Tol, R.S.J. (2014), Climate Economics, Edward Elgar.</p> <p>Markandya, A. Galarraga, I. & Rübbelke, D.T.G. (2017), Climate Finance, World Scientific.</p> | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) S1 (SS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: Economic Theory: Micro-Economics, 2016-07-12 | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA: Written test [60 min] AP: Presentation Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA: schriftliche Klausurarbeit [60 min] AP: Präsentation | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA: Written test [w: 4] AP: Presentation [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-studies include assignments, preparation and wrapping up of lectures as well as the preparation of presentations and of examinations. | | |


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| Data: | COMIPR. MA. Nr. 2078 / Examination number: 62002 | Version: 22.01.2020 | Start Year: SoSe 2009 |
| Module Name: | Competition Policy and Intellectual Property Rights | | |
| (English): | | | |
| Responsible: | Stephan, Johannes / Prof. Dr. | | |
| Lecturer(s): | Stephan, Johannes / Prof. Dr. | | |
| Institute(s): | Professor of International Resource Policy and Economic Development | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>This module is split into two sections. The objective of the first section is to inform students about the role of market-competition and competition policy for economic development with a focus on emerging markets. In particular, the pros and cons of competition law enforcement in emerging markets, as discussed in academia and the (international) political sphere, are critically reviewed.</p> <p>The objective of the second section is to make students aware of the two faces of IPR protection (copyright, trademark, trade secrets, and patents): the protection of IPR as a driver of investment, research and development, as well as innovation on the one side, and IPR as a hindrance to the dissemination, use of knowledge, and of competition on the other. In addition, the module focuses on how enterprises in catch-up economies can use IPR regimes with a view on international competitiveness.</p> | | |
| Contents: | <p>Course I: Market-competition and competition policy</p> <ul style="list-style-type: none"> I.1 The economic analysis of competition <ul style="list-style-type: none"> I.1.1 Conceptual approaches to competition I.1.2 Economic effects of competition I.1.3 Competition and market structure, oligopoly-theory I.2 Competition policy for emerging markets <ul style="list-style-type: none"> I.2.1 The goals of competition policy I.2.2 Competition as an engine of technological economic growth I.2.3 Socialist planning as an alternative to competition? I.2.4 The concept of Developmental States (Haggard, 2018) <p>Course II: The economics of intellectual property rights</p> <ul style="list-style-type: none"> II. 1 The economic rationales for IPR regimes <ul style="list-style-type: none"> II. 1.1 The investment, R&D, and innovation incentive II. 1.2 The knowledge-dissemination incentive II.2 IPR protection and the protection of competition <ul style="list-style-type: none"> II. 2.1 Patent thicket, patent trolls, etc. II. 2.2 The international dimension II.3 IPR regime and economic development <ul style="list-style-type: none"> II. 3.1 International agreements on IPR (TRIPS, etc.) II.3.2 Development-oriented IPR regimes | | |
| Literature: | <p>Fox, E. (2003) Abuse of dominance and monopolisation: How to protect competition without protecting competitors, EUI-RSCAC.</p> <p>Lipzynski, J. and J. Wilson (2001), 'Chapter 1: Industrial organisation: an introduction', in: Industrial Organisation: An Analysis of Competitive Markets, FT Prentice Hall Person Education, pp. 1-13.</p> <p>Lipzynski, J. and J. Wilson (2001), 'Chapter 11: Competition policy', in: Industrial Organisation: An Analysis of Competitive Markets, FT Prentice Hall Person Education, pp. 347-378.</p> <p>Singh, A. (2002), Competition and Competition Policy in Emerging Markets: International and Developmental Dimensions, UNCTAD G-24 Discussion Paper No. 18. (available online: http://www.unctad.org/en/docs/gdsmdpbg2418_en.pdf)</p> | | |


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| | <p>Andersen, B. (2003), 'If 'intellectual property rights' is the answer, what is the question? Revisiting the patent controversies', Econ. Innov. New Techn., 13(5), pp. 417-442</p> <p>Netanel, N.W. (2009) (ed.), Chapter 1: Introduction, in "The Development Agenda; global intellectual property and developing countries". New York: Oxford University Press, pp. 1-29.</p> <p>Stiglitz, Joseph E. (2004), Towards a pro-developmental and balanced IPR regime, Columbia University, mimeo.</p> <p>UNCTAD (2002) Competition policy and the exercise of intellectual property rights, TD/B/COM.2/CLP/22/Rev.1.</p> |
| Types of Teaching: | <p>S1 (SS): Lectures (2 SWS)</p> <p>S1 (SS): Exercises (2 SWS)</p> |
| Pre-requisites: | <p>Recommendations:</p> <p>Knowledge of micro-economics and macro-economics at Bachelor level equivalent to 6 ECTS points each is required to be able to follow teaching and tutorials in the module and successfully complete the module.</p> |
| Frequency: | yearly in the summer semester |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam.</p> <p>The module exam contains:</p> <p>KA [90 min]</p> <p>PVL: Case studies presentations and accompanying papers</p> <p>PVL have to be satisfied before the examination.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA [90 min]</p> <p>PVL: Fallstudienvorträge und Hausarbeiten</p> <p>PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden.</p> |
| Credit Points: | 6 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA [w: 1]</p> |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. |


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| Daten: | CORFIN. MA. Nr. 2964 / Prüfungs-Nr.: 60806 | Stand: 11.09.2019  | Start: SoSe 2010 |
| Modulname: | Corporate Finance | | |
| (englisch): | | | |
| Verantwortlich(e): | Horsch, Andreas / Prof. Dr. | | |
| Dozent(en): | Horsch, Andreas / Prof. Dr. | | |
| Institut(e): | Professur Allgemeine BWL, mit dem Schwerpunkt Investition und Finanzierung | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | Auf Basis der im Bachelorstudium erworbenen Kenntnisse der unternehmerischen Finanzwirtschaft (Corporate Finance) erweitern und vertiefen die Studierenden ihre Fähigkeit, Finanzierungsalternativen abzugrenzen und ökonomisch zu analysieren. Hierdurch werden sie in die Lage versetzt, aus dem Möglichenbereich der Finanzierung eine betriebswirtschaftlich sinnvolle Auswahl oder Kombination für eine konkrete Finanzierungsproblematik zu treffen. | | |
| Inhalte: | Eingang wird die Eignung verschiedener Strukturierungsansätze bis hin zum Lebenszykluskonzept für die systematische Aufarbeitung der Unternehmensfinanzierung geprüft. Es folgt eine Auseinandersetzung mit komplexen Formen der Eigenfinanzierung (Private/Public Equity), der Fremdfinanzierung (Bonds) sowie des Mezzanine Capital (u. a. Convertibles). Abschließend werden besondere Kombinationen von Finanzierungsvarianten zu komplexen Problemlösungen (insbes. Projektfinanzierung) behandelt. Die Übung dient der Vertiefung der in der Vorlesung präsentierten Inhalte anhand von (Rechen-)Aufgaben und Fallstudien. | | |
| Typische Fachliteratur: | Brealey/Myers/Allen: Principles of Corporate Finance, 13th ed., Boston et al. (McGraw-Hill) 2019, akt. Aufl. Chew jr. (ed.): The New Corporate Finance - Where Theory Meets Practice, 3rd ed., Boston et al. (McGraw-Hill) 2001, akt. Aufl. Paul/Horsch/Kaltoven/Uhde/Weiß: Unternehmerische Finanzierungspolitik, Stuttgart (Schäffer-Poeschel) 2017, akt. Aufl. Rudolph: Unternehmensfinanzierung und Kapitalmarkt, 2. Aufl., Tübingen (Mohr Siebeck) 2019 (in Vorb.), akt. Aufl. | | |
| Lehrformen: | S1 (SS): Vorlesung (2 SWS) S1 (SS): Übung (2 SWS) | | |
| Voraussetzungen für die Teilnahme: | Empfohlen: Keine | | |
| Turnus: | jährlich im Sommersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: | | |
| Leistungspunkte: | KA [90 min] | | |
| Note: | 6 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 180h und setzt sich zusammen aus 60h Präsenzzeit und 120h Selbststudium. Letzteres umfasst die Nachbereitung der Vorlesung, die Vorbereitung der Übung sowie generelle Literaturarbeit. | | |


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|---------------------------------|---|---------------------|-----------------------|
| Data: | EU. MA. Nr. 2966 / Examination number: 60509 | Version: 25.05.2016 | Start Year: SoSe 2011 |
| Module Name: | Decision Support Systems | | |
| (English): | | | |
| Responsible: | Felden, Carsten / Prof. Dr. | | |
| Lecturer(s): | Felden, Carsten / Prof. Dr. | | |
| Institute(s): | Institute of Information Management and Management Information Systems | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The lecture held in English language provides a widespread overview concerning the support of decision making from a theoretical and practical point of view. The theoretical basis comprises the System and Decision Theory as well as Business Intelligence. The practical point of view will be illustrated with the help of the demands of the energy sector. The individual situations lead to numerous concepts, methods and algorithms of decision making support. The practically relevant examples are meant to support the students theoretical and practical understanding of the system theory based context of support in decision making. This should qualify them to use the right methods and tools (methods and models) in real life situations. | | |
| Contents: | <ol style="list-style-type: none"> 1. Systems theory 2. Decision theory 3. Behavioristical methods 4. Models and methods of decision support | | |
| Literature: | <ol style="list-style-type: none"> 1. Gluchowski, P.; Gabriel, R.; Chameni, P. (1997): Management Support Systeme Computergestützte Informationssysteme für Führungskräfte und Entscheidungsträger, Berlin et al.: Springer 2. Turban, E.; J.E. Aronson; T.-P. Liang (2004): Decision Support Systems and Intelligent Systems, 7th ed. Upper Saddle River, N.J.: Prentice Hall 3. Luger, G. F. (2004): Artificial Intelligence - Structures and Strategies for Complex Problem Solving, 5th ed. Reading Massachusetts: Addison-Wesley 4. Sprague, Ralph; Watson, Hugh (1996): Decision Support for management, Prentice Hall | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) S1 (SS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: None | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] PVL: Case Study PVL have to be satisfied before the examination.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Fallstudie PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden.</p> | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |


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| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. The private studies consist of preparation and repetition for/of lectures and tutorials as well as the preparation for the exam. |
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|---|---|--|------------------|
| Daten: | DEU A1/ 1.Sem. Nr. 948 / Prüfungs-Nr.: 71101 | Stand: 04.08.2017  | Start: WiSe 2016 |
| Modulname: | Deutsch A1/ 1. Semester | | |
| (englisch): | German A 1/ 1st Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | 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. | | |
| Inhalte: | Kommunikation im Alltag (Menschen kennen lernen, Einkaufen, Restaurantbesuch, Tagesabläufe, Uhrzeit); Grammatik: zum Beispiel Fragestellungen, Zahlen, Konjugation der Verben, Präsens und Präteritum, Mengenangaben, Plural der Nomen, Komposita | | |
| Typische Fachliteratur: | Begegnungen A1+, Schubert Verlag | | |
| Lehrformen: | S1 (WS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Empfohlen: Keine Vorkenntnisse der deutschen Sprache notwendig | | |
| Turnus: | jährlich im Wintersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Erfolgreiche aktive Teilnahme an mindestens 80% des Unterrichts PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. | | |


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| Daten: | DEU A1/ 2. Sem. BA. Nr. 949 / Prüfungs-Nr.: 71102 | Stand: 04.08.2017  | Start: SoSe 2017 |
| Modulname: | Deutsch A1/ 2. Semester | | |
| (englisch): | German A1/ 2nd Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | 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. | | |
| Inhalte: | Orientierung in der Stadt beziehungsweise in der Firma, öffentliche Verkehrsmittel, Wegbeschreibung, Berufe und Arbeitsalltag, Körper und Gesundheit, Wohnungssuche und -einrichtung, Lebenslauf, Kleidung; Grammatik: zum Beispiel Präpositionen, Frageartikel, Modalverben, Possessivartikel, Perfekt, Konjunktionen, Demonstrativpronomen, Graduierung und Komparativ | | |
| Typische Fachliteratur: | Begegnungen A1+, Schubert Verlag | | |
| Lehrformen: | S1 (SS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Obligatorisch: Deutsch A1/ 1. Semester, 2015-08-26 oder äquivalente Sprachkenntnisse | | |
| Turnus: | jährlich im Sommersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Aktive Teilnahme am Unterricht (mindestens 80%) PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. Der Zeitaufwand beträgt 120 Stunden und setzt sich zusammen aus 60 Stunden Präsenzzeit und 60 Stunden Selbststudium. | | |


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| Daten: | DEU A2/1. Sem. BA.Nr. 950 / Prüfungs-Nr.: 71103 | Stand: 04.08.2017  | Start: WiSe 2016 |
| Modulname: | Deutsch A2/ 1. Semester | | |
| (englisch): | German A2/ 1st Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | Die Teilnehmer erweitern ihre Kenntnisse zu Grundlagen der deutschen Grammatik sowie ihren alltagspraktischen Wortschatz und führen Gespräche zu verschiedenen Themen des Alltags. | | |
| Inhalte: | 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 | | |
| Typische Fachliteratur: | Begegnungen A2+, Schubert Verlag | | |
| Lehrformen: | S1 (WS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Obligatorisch: Deutsch A1/ 2. Semester, 2015-08-26 oder äquivalente Sprachkenntnisse | | |
| Turnus: | jährlich im Wintersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Erfolgreiche aktive Teilnahme an mind. 80% d. Unterrichts PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. | | |


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| Daten: | DEUA/2.Sem BA.Nr. 951 / Prüfungs-Nr.: 71105 | Stand: 26.08.2015  | Start: SoSe 2017 |
| Modulname: | Deutsch A2/ 2. Semester | | |
| (englisch): | German A2/ 2nd Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | Die Teilnehmer erweitern ihre Kenntnisse zu Grundlagen der deutschen Grammatik sowie ihren alltagspraktischen Wortschatz und führen Gespräche zu verschiedenen Themen des Alltags. | | |
| Inhalte: | 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, | | |
| Typische Fachliteratur: | Begegnungen A2+, Schubert Verlag | | |
| Lehrformen: | S1 (SS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Obligatorisch: Deutsch A2/ 1. Semester, 2015-08-26 oder äquivalente Sprachkenntnisse | | |
| Turnus: | jährlich im Sommersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Erfolgreiche aktive Teilnahme an mind. 80% d. Unterrichts PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. | | |


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| Daten: | DEUB1/1.Sem. Nr. 952 / Prüfungs-Nr.: 71104 | Stand: 04.08.2017  | Start: WiSe 2016 |
| Modulname: | Deutsch B1/ 1.Semester | | |
| (englisch): | German B1/ 1st Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | Die Teilnehmer bauen die in den Modulen Deutsch A1 und A2 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. | | |
| Inhalte: | Zusammenleben der Menschen in Deutschland (Wohn- und Lebensformen, Vorstellungen über berufliche Entwicklung und Freizeitgestaltung, Konsumverhalten, Beziehung zur Natur) | | |
| Typische Fachliteratur: | Begegnungen B1+, Schubert Verlag | | |
| Lehrformen: | S1 (WS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Obligatorisch: Deutsch A2/ 2. Semester, 2015-08-26 oder äquivalente Sprachkenntnisse | | |
| Turnus: | jährlich im Wintersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Erfolgreiche aktive Teilnahme an mind. 80% d. Unterrichts PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. | | |

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| Daten: | DEUB1/2. Sem. 953 / Prüfungs-Nr.: 71106 | Stand: 26.08.2015  | Start: SoSe 2017 |
| Modulname: | Deutsch B1/ 2. Semester | | |
| (englisch): | German B1/ 2nd Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | Die Teilnehmer bauen die in dem Modul Deutsch b1/1.Semester 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. | | |
| Inhalte: | Zusammenleben der Menschen in Deutschland (Wohn- und Lebensformen, Vorstellungen über berufliche Entwicklung und Freizeitgestaltung, Konsumverhalten, Beziehung zur Natur) | | |
| Typische Fachliteratur: | Begegnungen B1+, Schubert Verlag | | |
| Lehrformen: | S1 (SS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Obligatorisch: Deutsch B1/ 1.Semester, 2015-08-26 oder äquivalente Sprachkenntnisse | | |
| Turnus: | jährlich im Sommersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Erfolgreiche aktive Teilnahme an mind. 80% d. Unterrichts PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. | | |


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| Daten: | B2.2 BA. Nr. / Prüfungs-Nr.: 70312 | Stand: 04.04.2016  | Start: SoSe 2017 |
| Modulname: | Deutsch B2/ 2. Semester | | |
| (englisch): | German B2/ 2nd Semester | | |
| Verantwortlich(e): | Bellmann, Kerstin | | |
| Dozent(en): | Bellmann, Kerstin | | |
| Institut(e): | Internationales Universitätszentrum | | |
| Dauer: | 1 Semester | | |
| Qualifikationsziele / Kompetenzen: | Die Teilnehmer bauen ihre sprachlichen Kenntnisse und Fertigkeiten auf dem Niveau B2 aus. Sie wiederholen und erweitern ihren Wortschatz. Mithilfe handlungsorientierter Aufgaben und Aktivitäten machen die Teilnehmer sich vertraut mit Lernstrategien, Grammatik, Wortschatz, Landeskunde und interkulturellen Aspekten. Die Teilnehmer verstehen und bearbeiten authentische Texte im Lesen, Hören, Sprechen und Schreiben. | | |
| Inhalte: | Kultur & Geschichte, Fertigkeiten im Berufsleben (z.B. Telefonieren) deutsche Geschichte, Literatur, Zukunftsvisionen, Grammatik (u.a. Partizipien, indirekte Rede, Konjunktiv I & II, Funktionverbgefüge) | | |
| Typische Fachliteratur: | Aspekte B2 (ISBN: 978-3-12-606012-7) | | |
| Lehrformen: | S1 (SS): Übung (4 SWS) | | |
| Voraussetzungen für die Teilnahme: | Obligatorisch: Deutsch B2/ 1. Semester, 2016-04-04 abgeschlossenes B1-Niveau | | |
| Turnus: | jährlich im Sommersemester | | |
| Voraussetzungen für die Vergabe von Leistungspunkten: | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Mind. Anwesenheit 80 % PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Leistungspunkte: | 4 | | |
| Note: | Die Note ergibt sich entsprechend der Gewichtung (w) aus folgenden(r) Prüfungsleistung(en): KA [w: 1] | | |
| Arbeitsaufwand: | Der Zeitaufwand beträgt 120h und setzt sich zusammen aus 60h Präsenzzeit und 60h Selbststudium. | | |


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|---------------------------------|--|--|-----------------------|
| Data: | ECOTHE. MA. Nr. 2900 / Examination number: 61416 | Version: 12.07.2016  | Start Year: SoSe 2017 |
| Module Name: | Economic Theory: Macro-Economics | | |
| (English): | | | |
| Responsible: | Schönfelder, Bruno / Prof. Dr. | | |
| Lecturer(s): | Schönfelder, Bruno / Prof. Dr. | | |
| Institute(s): | Professor of Economics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students are able to discuss macro-economic problems on an intermediate level. | | |
| Contents: | The course relates to all relevant issues of macro-economics, such as national output and income, aggregate demand and supply, employment, fiscal and monetary policy. | | |
| Literature: | Abel/Bernanke/Croushore (2013): Macroeconomics. Pearson. | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) S1 (SS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: No previous knowledge of economics is required. | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] PVL: A midterm test and the fulfilment of up to three assignments. Further details are announced in class. PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Ein Zwischentest und Abgabe von bis zu drei Belegarbeiten. Genaueres wird in der Veranstaltung bekannt gegeben. PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-studies include assignments, preparation and wrapping up of lectures as well as preparation of presentations and of examinations. | | |

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|---------------------------------|--|--|-----------------------|
| Data: | ECOTHE. MA. Nr. 3420 / Examination number: 61415 | Version: 12.07.2016  | Start Year: WiSe 2016 |
| Module Name: | Economic Theory: Micro-Economics | | |
| (English): | | | |
| Responsible: | Schönfelder, Bruno / Prof. Dr. | | |
| Lecturer(s): | Schönfelder, Bruno / Prof. Dr. | | |
| Institute(s): | Professor of Economics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students become proficient in microeconomic theory (at an intermediate level). | | |
| Contents: | The course offers an overview of all relevant micro-economic topics such as the economics of the firm, supply and demand, market structures, competition and monopoly, labor markets. | | |
| Literature: | Friedman, D. (1996): Hidden Order. New York; Varian, H. (2014): Intermediate Microeconomics, New York. | | |
| Types of Teaching: | S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: Students should be familiar with calculus. | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] PVL: A midterm test, further details are announced in class PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Zwischenprüfung, Genaueres wird in der Veranstaltung bekannt gegeben PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-studies include assignments, preparation and wrapping up of lectures as well as preparation of presentations and of examinations. | | |


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|---------------------------------|--|--|-----------------------|
| Data: | ECOSYS. MA. Nr. 2918 / Examination number: 20205 | Version: 10.08.2009  | Start Year: WiSe 2009 |
| Module Name: | Ecosystems | | |
| (English): | | | |
| Responsible: | Heilmeier, Hermann / Prof. (apl.) Dr. | | |
| Lecturer(s): | Heilmeier, Hermann / Prof. (apl.) Dr. | | |
| Institute(s): | Institute of Biosciences | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>The aims of the lecture are:</p> <ul style="list-style-type: none"> understanding of major processes in ecosystems on physical, chemical and biological basics; competence for ad hoc evaluation of fundamental anthropogenic disturbances of ecosystem components, processes and services; Ability for stimulating management practices orientated towards a sustainable utilization of (semi-) natural and human-dominated ecosystems. | | |
| Contents: | <p>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.</p> | | |
| Literature: | <p>Beeby: Applying Ecology (Chapman & Hall) Newman: Applied Ecology & Environmental Management (Blackwell) Odum: Ecology - A Bridge between Science and Society (Sinauer) Vogt et al.: Ecosystems (Springer) Aber & Melillo: Terrestrial Ecosystems (Academic Press)</p> | | |
| Types of Teaching: | <p>S1 (WS): Lectures (1 SWS) S1 (WS): Exercises (2 SWS)</p> | | |
| Pre-requisites: | <p>Recommendations: No requirements.</p> | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: AP: paper (15 pages)</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP: Belegarbeit (15 Seiten)</p> | | |
| Credit Points: | 4 | | |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w): AP: paper (15 pages) [w: 1]</p> | | |
| Workload: | The workload is 120h. It is the result of 45h attendance and 75h self-studies. | | |

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|---------------------------------|---|--|-----------------------|
| Data: | ENVMGTPOL. MA. Nr. 2909 / Examination number: 62403 | Version: 31.05.2018  | Start Year: WiSe 2018 |
| Module Name: | Environmental Management and Policies | | |
| (English): | | | |
| Responsible: | Fröhling, Magnus / Prof. | | |
| Lecturer(s): | Fröhling, Magnus / Prof. | | |
| Institute(s): | Professor of Ressourcemanagement | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students are able to identify and explain environmental issues accruing in companies. They explain the origin of environmental impacts, the framework which has to be considered and are able to apply selected methods and tools to solve (simplified) problems accruing in practice. They discuss the status of these methods and tools with regard to real problem instances and the current scientific literature and political discussion. | | |
| Contents: | <p>The course covers among others:</p> <ul style="list-style-type: none"> • Environmental impacts of industrial and business activities, • Societal, economic and legal frameworks of environmental protection, • Environmental Management Systems, and • Methods and tools of Cleaner Production. | | |
| Literature: | <ul style="list-style-type: none"> • Calow (1999): Blackwells Concise Encyclopedia of Environmental Management, John Wiley & Sons • Dobson (2016): Environmental Politics, Oxford University Press • Russo (2008): Environmental Management: Readings and Cases, Sage Pubn • Schaltegger, Burritt, Petersen (2003): An Introduction to Corporate Environmental Management, Greenleaf Publishing • Tinsley, Pillai (2016): Environmental Management Systems: Understanding Organizational Drivers and Barriers, Routledge | | |
| Types of Teaching: | <p>S1 (WS): Lecture Environmental Management and Policies / Lectures (2 SWS)</p> <p>S1 (WS): Tutorial Environmental Management and Policies / Exercises (2 SWS)</p> | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam.</p> <p>The module exam contains:</p> <p>KA [90 min]</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA [90 min]</p> | | |
| Credit Points: | 6 | | |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA [w: 4]</p> | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. | | |


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|---------------------------------|---|--|-----------------------|
| Data: | FINEC. MA. Nr. 3693 / Examination number: 61418 | Version: 09.12.2019  | Start Year: SoSe 2020 |
| Module Name: | Finance in Developing and Emerging Countries: A Historical and Evolutionary Perspective | | |
| (English): | | | |
| Responsible: | Schönfelder, Bruno / Prof. Dr. | | |
| Lecturer(s): | Schönfelder, Bruno / Prof. Dr. | | |
| Institute(s): | Professor of Economics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Participants need to understand the variety and complexity of the preconditions, that need to be met, in order to enable the financial sector to properly perform its economic function, and, accordingly, its evolutionary improbability. | | |
| Contents: | <ol style="list-style-type: none"> 1. Historic development of the financial sectors in the UK, the United States and Canada during the 18th and 19th century (with outlook on the 20th century) 2. Financial History of Mexico 3. Financial History of Brazil 4. Financial History of Central Eastern and Eastern Europe, and Russia 5. Theories of Financial Evolution | | |
| Literature: | <p>Calomiris/Haber: Fragile by Design. Princeton: Princeton University Press 2014</p> <p>Schönfelder: Vom Spätsozialismus zur Privatrechtsordnung. Berlin: Berliner Wissenschaftsverlag 2012</p> | | |
| Types of Teaching: | <p>S1 (SS): Lectures (2 SWS)</p> <p>S1 (SS): Exercises (2 SWS)</p> | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains:</p> <p>KA [90 min]</p> <p>AP: Term Paper (ca. 10 pages) incl. presentation und discussion</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA [90 min]</p> <p>AP: Hausarbeit (ca. 10 Seiten) incl. deren Präsentation und Diskussion in der Übung</p> | | |
| Credit Points: | 6 | | |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA [w: 1]</p> <p>AP: Term Paper (ca. 10 pages) incl. presentation und discussion [w: 1]</p> | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. | | |

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|---------------------------------|---|--|-----------------------|
| Data: | FCRY. MA. Nr. 3611 / Examination number: 23002 | Version: 02.02.2018  | Start Year: WiSe 2018 |
| Module Name: (English): | Fundamentals of Crystallography | | |
| Responsible: | Gumeniuk, Roman / Prof. | | |
| Lecturer(s): | Gumeniuk, Roman / Prof. | | |
| Institute(s): | Institute of Experimental Physics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students should be able to describe crystal structure, to perform structural analysis and to understand relationships between crystal structure and some physical properties. | | |
| Contents: | Crystal lattice, symmetry elements, pointgroups, infinite symmetry elements, space group, International tables of crystallography Reciprocal lattice, Structural factors, reflection conditions, Single crystal- and powder X-ray diffraction methods. Crystal growth, Tensor properties and transformation, pyro-, piezo-electricity, permittivity, elastic properties etc. | | |
| Literature: | W. Borchardt-Ott: Crystallography: An Introduction, Springer V.K. Pecharsky, P.Y. Zavalij: Fundamentals of Powder Diffraction and structural Characterization of Materials, Springer M. de Graef, M.E. McHenry: Structure of Materials: An Introduction to Crystallography, Diffraction and Symmetry, Cambridge University Press R.E. Newnham: Properties of Materials: Anisotropy, Symmetry, Structure; Oxford University Press | | |
| Types of Teaching: | S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (1 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [120 min] Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [120 min] | | |
| Credit Points: | 4 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 120h. It is the result of 45h attendance and 75h self-studies. | | |

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|---------------------------------|---|---------------------|-----------------------|
| Data: | FPD. MA. Nr. 3562 / Examination number: 50320 | Version: 22.02.2017 | Start Year: SoSe 2018 |
| Module Name: | Fundamentals of Plastic Deformation | | |
| (English): | | | |
| Responsible: | Prahl, Ulrich / Prof. Dr.-Ing. | | |
| Lecturer(s): | Prahl, Ulrich / Prof. Dr.-Ing. | | |
| Institute(s): | Institute of Metal Forming | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Consolidated knowledge on the basics of plastic deformation (deformation mechanisms, flow stress, influences on flow stress, classification of forming processes, flow conditions). Students will be capacitated to understand and define strain and tension conditions in forming processes, geometric and kinematic conditions as well as calculating required force and work. | | |
| Contents: | <ul style="list-style-type: none"> • Introduction into the subject field • Mechanisms of plastic deformation • Definition of forming specific characteristics • Flow stress behavior during hot and cold forming (including influences on flow stress) • Softening and hardening behavior • Methods to determine of flow stress • Constitutive equations in forming • Analytic determination of force and work • Introduction of several forming processes | | |
| Literature: | Gottstein, Günter: Physical Foundation of Materials Science. Springer, 2004 Kachanov, L.M.: Fundamentals of the Theory of Plasticity, Dover Publications Dixit, P.M.: Plasticity Fundamentals and Application, CRC Press, Taylor&Francis Group | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] | | |
| | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] | | |
| Credit Points: | 3 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. | | |

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| Data: | Geomod. MA. Nr. 638 / Examination number: 30114 | Version: 05.12.2018  | Start Year: WiSe 2019 |
| Module Name: | Geomodelling - Geostatistics for Natural Resource Modelling | | |
| (English): | | | |
| Responsible: | Benndorf, Jörg / Prof. Dr.-Ing. | | |
| Lecturer(s): | | | |
| Institute(s): | Institute for Mine Surveying and Geodesy | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>After successful completion of the course, students are able to:</p> <ul style="list-style-type: none"> - explain the theoretical foundation of spatial data analysis, geostatistical model building and estimation, - apply geostatistical methods in the context of estimating natural resources/reserves, - critically evaluate model assumptions of different estimation and simulation method and choose suitable methods for specific applications, - discuss the critical character of the SMU-size to recoverable reserves, - conduct a resource/reserve estimation in a simple case study. | | |
| Contents: | <p>Importance of Resource Modelling and Estimation in the Value Chain of Mining, Uni-variate and Multi-variate Explorative Data Analysis, Analysis of Spatial Continuity, the Spatial Random Function Model, Model Assumptions of Stationarity and Ergodicity, Inference of a Spatial Random Function using unbiased Estimators, Dealing with Preferential Sampling, Variography and Variogram Modeling, Simple Methods for Spatial Estimation including the Polygon Method, Triangulation, Inverse Distance Power and Polynomial Regression, Geostatistical Methods for Spatial Estimation including Simple Kriging, Ordinary Kriging and Universal Kriging, Integrating Secondary Information into Spatial Modeling using Techniques of Co-Kriging, other methods including Indicator Kriging and Block Kriging, Introduction in Modeling spatial Uncertainty using Conditional Simulation, the Method of Sequential Gaussian Simulation, Geostatistical Considerations in Estimating Reserves in Terms of Volume-Variance Relationship for defining Smallest Movable Units and Grade Tonnage Curves, Applications in Mining Cases, Introduction to CRIRSCO-based International Reporting standards (example JORC Code).</p> | | |
| Literature: | <p>M. Armstrong: "Basic Linear Geostatistics", Springer Verlag; H. Akin, H. Siemes: „Praktische Geostatistik“, Springer Verlag; A. G. Journel, and C.J. Huijbregts, 1978, Mining Geostatistics, Academic Press; P. Goovaerts: "Geostatistics for Natural Resource Evaluation", Oxford University Press; T. Schafmeister: "Geostatistik für die hydrogeologische Praxis", Springer Verlag</p> | | |
| Types of Teaching: | <p>S1 (WS): Geomodelling – Geostatistics for natural resource modelling - Lecture / Lectures (2 SWS) S1 (WS): Geomodelling – Geostatistics for natural resource modelling - Practical work in the computer lab / Practical Application (2 SWS)</p> | | |
| Pre-requisites: | <p>Recommendations: Angewandte Statistik, 2009-05-25 Infinitesimalrechnung, An introductory course in statistics.</p> | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: KA* [90 min]</p> | | |

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| | <p>AP*: Set of assignments</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA* [90 min]</p> <p>AP*: Hausarbeiten</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> |
| Credit Points: | 5 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA* [w: 2]</p> <p>AP*: Set of assignments [w: 1]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | The workload is 150h. It consists of 60h presence time (lectures and practical), and 90 hours independent work including group work, practical, self-study and preparation for examination. |


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| Data: | GWCGWMB. MA. Nr. 3628 / Examination number: 31722 | Version: 04.07.2018  | Start Year: WiSe 2018 |
| Module Name: | Ground Water Chemistry for GW-Management - Basics | | |
| (English): | | | |
| Responsible: | Drebenstedt, Carsten / Prof. Dr. Hoth, Nils / Dr. | | |
| Lecturer(s): | Hoth, Nils / Dr. | | |
| Institute(s): | Institute of Mining and Special Civil Engineering | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The student is widening his chemical know how in the field of hydrochemical aspects in particular with respect to groundwater. He will be able to understand and solve basic as well as more complex water quality problems. He gains an understanding of basic practical lab work for analysis. | | |
| Contents: | <ul style="list-style-type: none"> - water as universal solvent - drinking water standards / disease aspects - basics of thermodynamics in relation to Ground waters (ionic strength, activity versus concentration, saturation index) - species interactions, solubility of gases in water - redox reactions - stability diagrams - solution/ precipitation of mineral phases - equilibria to the fluid phase - hydrochemical milieu measurements (background) - Acidity, alkalinity - K_b, K_s values - and titration in general - Carbonic acid - Carbonate phases interaction - Ground Water Sampling (hydraulic and chemical criteria) - Field handling of Water Samples (Filtration, Conservation) | | |
| Literature: | APPELO & POSTMA (1996) or (2005): Geochemistry, groundwater and pollution, Balkema. | | |
| Types of Teaching: | S1 (WS): Basics of GW chemistry / Lectures (2 SWS) S1 (WS): practical lab courses - Basic hydrochemical lab work, basics of titration, photometry etc. / Practical Application (2 SWS) | | |
| Pre-requisites: | Recommendations: Basic knowledge of chemistry and hydrogeology | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains:</p> <p>KA*: written exam to GW-chemistry [90 min] AP*: reports of lab practical work</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA*: Klausur Grundwasserchemie - Grundlagen [90 min] AP*: Protokolle zu den Laborpraktika Grundwasserchemie-Grundlagen</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA*: written exam to GW-chemistry [w: 2] | | |

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| | AP*: reports of lab practical work [w: 1] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. (120 h are spent on preparation, writing the lab course reports and self study) |


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| Data: | HISTENV. MA. Nr. 3424 / Examination number: 60134 | Version: 01.07.2015 | Start Year: SoSe 2016 |
| Module Name: | History of the Environment | | |
| (English): | | | |
| Responsible: | Albrecht, Helmuth / Prof. Dr. | | |
| Lecturer(s): | Pohl, Norman / Dr. | | |
| Institute(s): | Institute of Industrial Archeology and History of Science and Technology | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The module seeks to transmit historical developments in the field of technology and ecology. Hence, providing the cultural and historic background of contemporary society. | | |
| Contents: | The module offers an introduction to the development of environmental protection and technology and the use of natural resources. | | |
| Literature: | John Robert McNeill: Blue Planet. 2003 Donald Worster: Dust bowl. The Southern plains in the 1930s. Oxford 1979. Donald Worster: The wealth of nature. Environmental history and the ecological imagination. Oxford 1993. | | |
| Types of Teaching: | S1 (SS): History of environment / Seminar (2 SWS) | | |
| Pre-requisites: | Recommendations: Scholarly Rhetoric, 2012-02-10 Abitur-level English or equivalent knowledge of English. | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: AP*: 15 page paper AP: Presentation [20 to 30 min] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP*: 15-seitige Belegarbeit AP: Präsentation [20 bis 30 min] * Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein. | | |
| Credit Points: | 3 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): AP*: 15 page paper [w: 1] AP: Presentation [w: 1] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. | | |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. Self-study includes preparation and follow-up work for in-class instruction as well as preparation for and completion of the 12 page paper and the presentation. | | |


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| Data: | HRMOB. MA. Nr. 3203 / Examination number: 61008 | Version: 14.02.2017 | Start Year: SoSe 2011 |
| Module Name: | Human Resource Management and Organizational Behavior (HRMOB) | | |
| (English): | | | |
| Responsible: | Stumpf-Wollersheim, Jutta / Prof. Dr. rer. pol. | | |
| Lecturer(s): | Stumpf-Wollersheim, Jutta / Prof. Dr. rer. pol. | | |
| Institute(s): | International Management and Strategy | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>The primary objective of this course is to help you learn to diagnose management situations so that you will be able to transfer this skill to your working world.</p> <p>Specific objectives of the course include:</p> <ol style="list-style-type: none"> 1. Understanding the relevance of human resources for organizations and the key concepts of human behavior in organizations. 2. Appreciating how the human side of management is an essential complement to the technical skills you are learning in other courses. 3. Learning concepts and approaches that will enable you to analyze HR- and organizational problems and to develop appropriate solutions. 4. Developing the knowledge and skills you need to be a successful manager of yourself and others. | | |
| Contents: | <ol style="list-style-type: none"> 1. Introduction 2. Organizational Behavior (OB) <ol style="list-style-type: none"> 2.1 Individual level (foundations of individual behavior; impacts of individual characteristics; impact of situational factors) 2.2 Group level (foundations of group behavior, understanding work teams; group processes e.g., learning in teams) 2.3 Leadership 3. Human Resource Management (HRM) <ol style="list-style-type: none"> 3.1 Changing Nature of HRM 3.2 HRM Planning 3.3 Human Resource Adjustments 3.4 Training and Developing HR 3.5 Compensating HR <p>Presentations and Conclusions</p> | | |
| Literature: | <p>Mathis, R.L.; Jackson, J.H.: „Human Resource Management“, South Western College Publishing: Cincinnati 2006</p> <p>Judge, T.A.; Robbins, S.P.: „Organizational Behavior“, Pearson Prentice Hall: Upper Saddle River, N.J. 2016</p> | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) | | |
| Pre-requisites: | Recommendations: None | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam.</p> <p>The module exam contains:</p> <p>KA: Final test [90 min]</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA: Abschlussklausur [90 min]</p> | | |
| Credit Points: | 3 | | |
| Grade: | The Grade is generated from the examination result(s) with the following | | |

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| | weights (w): KA: Final test [w: 1] |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. |

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| Data: | HYGWMB. MA. Nr. 3629 / Examination number: 31723 | Version: 04.07.2018  | Start Year: WiSe 2018 |
| Module Name: (English): | Hydrogeology for GW-Management - Basics | | |
| Responsible: | Drebenstedt, Carsten / Prof. Dr. Hoth, Nils / Dr. | | |
| Lecturer(s): | Hoth, Nils / Dr. | | |
| Institute(s): | Institute of Mining and Special Civil Engineering | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>The student will gain general knowledge to characterise and investigate hydrogeological systems. So he will be able to solve relevant hydrogeological tasks.</p> <p>He will be able to select appropriate techniques for investigation and data evaluation. Furthermore he will gain knowledge around groundwater protection measures.</p> | | |
| Contents: | <p>Lecture:</p> <ul style="list-style-type: none"> - general understanding of subsurface flow-processes (water-saturated GW-zone and water-unsaturated "soil-zone"). - porous media behaviour of loose rock aquifers (differences of kf-value versus permeability) - fissure/ fracture driven preferential flow in hard rock bodies - methods to estimate relevant flow parameters (challenges around) - pumping test (design, performance) and evaluation - saline water intrusion (fresh-saltwater interface at coastal sites). - Ground water flow to wells and drilling of wells (well development, rehabilitation) - basic understanding of acid mine drainage generation - Well head protection zones - general GW protection - European water frame work <p>Practical exercises:</p> <p>Estimation of relevant aquifer parameters (kf-values)</p> <p>Characterisation of water samples</p> <p>Sampling (low flow sampling), filtration, impact of construction materials on monitoring wells,</p> <p>Classification of loose rock materials</p> <p>hXRF-measurements as basis for qualitative characteristics of loose rock and dump/ tailings materials</p> | | |
| Literature: | <p>Fetter (1993): Applied Hydrogeology.</p> <p>Domenico & Schwartz (1998): Physical and Chemical Hydrogeology.</p> <p>USGS (2004) Water Supply Paper.</p> <p>Sterret (2007): Groundwater and Wells.</p> <p>DWGW-Richtlinie W101</p> | | |
| Types of Teaching: | <p>S1 (WS): Lectures (2 SWS)</p> <p>S1 (WS): hydrogeology - practica and exercises / Practical Application (2 SWS)</p> | | |
| Pre-requisites: | Recommendations: Basic knowledge in Geology, Applied Geosciences | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam.</p> <p>The module exam contains:</p> <p>KA* [90 min]</p> <p>AP*: Practica and exercises</p> | | |

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| | <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA* [90 min] AP*: Praktikum und Übungen</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> |
| Credit Points: | 6 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w): KA* [w: 2] AP*: Practica and exercises [w: 1]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. (120 h are spent on preparation for the classes, preparing the reports and self study) |


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| Data: | OMIS. MA. Nr. 2903 / Examination number: 60517 | Version: 06.07.2016  | Start Year: WiSe 2016 |
| Module Name: (English): | Information Management | | |
| Responsible: | Felden, Carsten / Prof. Dr. | | |
| Lecturer(s): | Felden, Carsten / Prof. Dr. | | |
| Institute(s): | Institute of Information Management and Management Information Systems | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students get a general view to understand integration of business and technology in companies. This course provides a comprehensive and integrative understanding of essential new technologies, information system applications, and their impact on business models and managerial decision making. From a managerial perspective, the course addresses an application of concepts regarding hardware, software, and data organization. The students will understand and apply basics of information systems with a focus on economic issues as well as the significance of information systems for companies and the practical information and communication technologies to increase the efficiency and effectiveness of information systems. | | |
| Contents: | <ol style="list-style-type: none"> 1. Introduction: the domain of business information systems 2. Organizations and systems 3. Data, information, and knowledge 4. Information systems, and organizational infrastructure 5. Communication infrastructure 6. ICT systems infrastructure 7. The business environment 8. Electronic business, electronic commerce, and electronic government 9. Assessing the use and impact of information systems 10. Planning, strategy, and management 11. Services, projects and operations 12. Information systems development 13. Successful informatics practice | | |
| Literature: | <p>Beynon-Davies, P.: Business Information System, Palgrave Macmilian edition 2, London, 2013</p> <p>Bocij, P.; Business Information System, Global Edition, Pearson Education LTD, Harlow, 2014</p> <p>Laudon, K.; Laudon, J.: Management Information Systems, edition 14, Pearson Education, Prentice Hall, 2015.</p> | | |
| Types of Teaching: | <p>Lecture / Lectures (2 SWS)</p> <p>Recitation / Exercises (2 SWS)</p> | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains:</p> <p>KA [90 min]</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA [90 min]</p> | | |
| Credit Points: | 6 | | |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA [w: 1]</p> | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self- | | |


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| Data: | INTMAN. MA. Nr. 2072 / Examination number: 62007 | Version: 23.04.2020  | Start Year: SoSe 2016 |
| Module Name: (English): | International Business and Management | | |
| Responsible: | Stephan, Johannes / Prof. Dr. | | |
| Lecturer(s): | Stephan, Johannes / Prof. Dr. | | |
| Institute(s): | Professor of International Resource Policy and Economic Development | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>The intention of this module is that the student is enabled to analyse the particularities of management of firms where several international markets are involved. This helps to-be-managers to prepare for the particular challenges and problems involved in the internationalisation of firms. Moreover, after completion of the module, students can analyse and assess the value of inward and outward foreign direct investment of firms for the host and home countries.</p> <p>The first part of this course focuses on explaining the existence of the multinational enterprise by generalising the theory of the firm and its characterisation on the one side and particularities of management in multinational enterprises on the other. The management part of the course analyses strategies of entry into foreign markets, including entry modes, entry timing and the location from an institutional perspective and by use of case studies. The third part of the course is concerned with the management of knowledge and R&D both within the multinational enterprise and between the multinational enterprise and its host economies. This is discussed in terms of effects of knowledge and R&D management on subsidiary development and on technology transfer externalities (spillovers).</p> | | |
| Contents: | <ol style="list-style-type: none"> 1. Economic theories of internationalisation and TNC <ul style="list-style-type: none"> ◦ Static vs dynamic theories ◦ Internalisation-theories and asset-based theories 2. International management and entry strategies <ul style="list-style-type: none"> ◦ Network theory ◦ Choice of location and time of entry ◦ Entry modes, control and market power ◦ Internationalisation of knowledge 3. Economic analysis of TNCs and policy-implications <ul style="list-style-type: none"> ◦ FDI and host country effects, national innovation systems ◦ TNCs and Intellectual Property Rights ◦ Foreign Direct Investment policies | | |
| Literature: | <p>Cavusgil, S.T., G. Knight, and J.R. Riesenberger (2008), International Business - Strategy, Management, and the New Realities, 1st ed., Pearson International, Prentice Hall.</p> <p>Dunning, J. and S.M. Lundan (2008), Multinational Enterprises and the Global Economy, 2nd edition. Cheltenham: Edward Elgar.</p> <p>Letto-Gillies, G. (2005) Transnational Corporations and International Production - Concepts, Theories and Effects. Cheltenham: Edward Elgar.</p> <p>Peng, M.W. and K. E. Meyer (2009) International Business, 1st ed., Cengage Learning.</p> <p>Pitelis, C and R. Sudgen (eds) (2000) The Nature of the Transnational Firm. London: Routledge.</p> | | |
| Types of Teaching: | <p>S1 (SS): Lectures (2 SWS)</p> <p>S1 (SS): Exercises (2 SWS)</p> | | |
| Pre-requisites: | <p>Recommendations:</p> <p>Knowledge of micro-economics and macro-economics at Bachelor level</p> | | |


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| | equivalent to 6 ECTS points each is required to be able to follow teaching and tutorials in the module and successfully complete the module. |
| Frequency: | yearly in the summer semester |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains:</p> <p>KA* [90 min] PVL*: Presentations and paper submissions [20 min] PVL have to be satisfied before the examination.</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA* [90 min] PVL*: Präsentationen und Hausarbeiten [20 min] PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden.</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> |
| Credit Points: | 6 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA* [w: 1] PVL*: Presentations and paper submissions [w: 0]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. |


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| Data: | IDEVRES. MA. Nr. 3417 / Examination number: 62005 | Version: 23.04.2020 | Start Year: WiSe 2013 |
| Module Name: | International Development and Resources | | |
| (English): | | | |
| Responsible: | Stephan, Johannes / Prof. Dr. | | |
| Lecturer(s): | Stephan, Johannes / Prof. Dr. | | |
| Institute(s): | Professor of International Resource Policy and Economic Development | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>Students will be able to understand the implications of management of firms in the environment of developing economies. Companies involved in a region that is characterised by much lower levels of economic development face particular challenges in the management: they have to consider the implications that development strategies, both national and coordinated by international organisations and NGOs, have on their activities.</p> <p>Of particular relevance in developing economies is the role of natural resources that are often abundant and currently their most precious source of national welfare. Students acquire the understanding that natural resources can easily turn into a curse, if they are not included into a coherent national development policy. 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.</p> | | |
| Contents: | <p>Part I - Economic development and emerging markets</p> <p>I.1 Foreign exchange and economic development</p> <p>I.2 Reminder of trade theory and politics</p> <p>I.3 Characteristics of developed, emerging, and developing countries</p> <p>I.4 Theories of Economic Development: Overview</p> <p>I.5 Development Policies: Approaches, Failures, and New Consensus?</p> <p>I.6 The Chinese way: infrastructure for development</p> <p>Part II - The role of natural resources for economic development</p> <p>II.1 Natural resources and environment as production factor</p> <p>II.2 The concept of the resource curse in general</p> <p>II.3 Concepts for a benign role of resources for development ("Successful resource-based development")</p> <p>II.4 The economics of export restrictions of depletable resources (example rare earth, other critical resources)</p> <p>Part III - Wrapping up and discussions in class, using the form of the political debate</p> <p>III.1 The system of the political debate</p> <p>III.2 Suggested topics for debate</p> | | |
| Literature: | <p>Reading for Part I</p> <p>Todaro, M. P. (2006): Economic Development, 9th edition, Addison Wesley, NY</p> <p>Clark, D.A. (ed) (2006) The Elgar Companion to Development Studies, EE.</p> <p>World Bank Development Reports (annual)</p> <p>Journal articles from e.g. "World Development"; "World Bank Economic Review"; "Journal of Development Economics"</p> <p>Reading for Part II</p> <p>Andersen, A. D. and B. Johnson (2014) Monocausalism versus Systems Approach to Development ' The Possibility of Natural Resource-based Development. <i>Institutions and Economies</i>, Vol. 6, No. 2, pp. 27-54</p> <p>van den Ploeg (2011) Natural Resources: Curse or Blessing? <i>Journal of</i></p> | | |


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| | <p><i>Economic Literature</i> 49/2, pp. 366-420 Gylfason 2001 Natural resources, education, and economic development Sachs Warner 1997 Natural Resource Abundance and Economic Growth (pdf-file freely available from NBER Working Papers Series)</p> |
| Types of Teaching: | <p>S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (2 SWS)</p> |
| Pre-requisites: | <p>Recommendations: Knowledge of micro-economics and macro-economics at Bachelor level equivalent to 6 ECTS points each is required to be able to follow teaching and tutorials in the module and successfully complete the module.</p> |
| Frequency: | yearly in the winter semester |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] PVL: Presentations and accompanying papers [15 min] PVL have to be satisfied before the examination.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Präsentationen und Hausarbeiten [15 min] PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden.</p> |
| Credit Points: | 6 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1]</p> |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. |

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| Data: | INTMAR. MA. Nr. 2073 / Examination number: 60405 | Version: 28.04.2020  | Start Year: SoSe 2010 |
| Module Name: | International Marketing | | |
| (English): | | | |
| Responsible: | Leischnig, Alexander / Prof. | | |
| Lecturer(s): | Leischnig, Alexander / Prof. | | |
| Institute(s): | Professor of Business-to-Business Marketing | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | After successful completion of the module, students should be able to explain the motives and barriers of internationalization and discuss and critique theories to explain internationalization. Students should know criteria to evaluate target markets and be able to distinguish and evaluate market entry modes. Furthermore, they should be able to develop global marketing strategies and discuss approaches to implement them. | | |
| Contents: | The module will start with basics of marketing and international marketing. It will then illuminate theories and frameworks to explain elements of internationalization and address central questions along the internationalization process. The module covers topics such as market selection, market entry, international marketing strategies and instruments, and coordination of and implementation of international marketing. | | |
| Literature: | Czinkota, M. R., & Ronkainen, I. A. (2013). International Marketing. 10th ed., South-Western. Hollensen, S. (2017). Global Marketing – A decision-oriented approach. 7th ed., Pearson. Homburg, C., Kuester, S., & Krohmer, H. (2013). Marketing Management – A Contemporary Perspective. 2nd ed. McGraw-Hill. Keegan, W. J., & Green, M. C. (2016). Global Marketing. 9th ed., Pearson. | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) S1 (SS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: - | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. | | |


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| Data: | Examination number: - | Version: 06.04.2020  | Start Year: SoSe |
| Module Name: | Internship [IBRE] | | |
| (English): | | | |
| Responsible: | Stephan, Johannes / Prof. Dr. | | |
| Lecturer(s): | | | |
| Institute(s): | Professor of International Resource Policy and Economic Development | | |
| Duration: | 37 Day(s) | | |
| Competencies: | The objective of the internship is to allow students to apply the knowledge acquired during their studies in practice. | | |
| Contents: | | | |
| Literature: | | | |
| Types of Teaching: | | | |
| Pre-requisites: | Mandatory: Prüfung auf Übereinstimmung der Ziele des Praktikums mit den Zielen des Studienganges durch den Prüfungsausschuss (Approval of the examination committee of IBDEM that the planned internship matches the objectives of the study programme.) | | |
| Frequency: | constantly | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: AP: Written report about the internship with a length of 15 pages of text, excl. graphs, pictures, and lists. The module is not graded. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP: Schriftlicher Bericht (15 Seiten Text) Das Modul wird nicht benotet. | | |
| Credit Points: | 10 | | |
| Grade: | The examination results are not rated. The credits are given when the exams are passed successfully. | | |
| Workload: | The workload is 300h. It is the result of 0h attendance and 300h self-studies. | | |


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| Data: | MINING. MA. Nr. 2914 / Examination number: 31703 | Version: 28.04.2010  | Start Year: WiSe 2010 |
| Module Name: | Introduction to Mining | | |
| (English): | | | |
| Responsible: | Drebenstedt, Carsten / Prof. Dr. | | |
| Lecturer(s): | Drebenstedt, Carsten / Prof. Dr. | | |
| Institute(s): | Institute of Mining and Special Civil Engineering | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | 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. | | |
| Contents: | 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. | | |
| Literature: | Hartmann et al: SME Mining Engineering Handbook, Vol. 1 and 2, Society of Mining, Metallurgy and Exploration, Littleton, Colorado, actual edition Hustrulid, Kuchta: Open pit mine planning and design, Balkema, latest edition | | |
| Types of Teaching: | S1 (WS): Lectures (1 SWS) S1 (WS): Exercises (1 SWS) | | |
| Pre-requisites: | Recommendations: No requirements. | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] | | |
| Credit Points: | 3 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. | | |


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| Data: | Examination number: - Version: 06.04.2020  Start Year: SoSe |
| Module Name: | Master Thesis [MBA IBRE] |
| (English): | |
| Responsible: | Stephan, Johannes / Prof. Dr. |
| Lecturer(s): | |
| Institute(s): | Professor of International Resource Policy and Economic Development |
| Duration: | 4 Month(s) |
| Competencies: | The student is supposed to elaborate a master thesis 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. |
| Contents: | 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 and the public defending of the thesis in a colloquium of 30 minutes. |
| Literature: | Depends on the Master Thesis topic. |
| Types of Teaching: | |
| Pre-requisites: | Mandatory: Abschluss von Modulen im Umfang von 84 Leistungspunkten des Studienprogramms (Completion of 84 Credit Points of the MBA IBRE programme). |
| Frequency: | yearly in the summer semester |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: AP*: Master thesis (60-80 pages) AP*: Defence [40 to 40 min] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP*: Masterarbeit (60 - 80 Seiten) AP*: Kolloquium [40 bis 40 min] * Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein. |
| Credit Points: | 20 |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): AP*: Master thesis (60-80 pages) [w: 3] AP*: Defence [w: 1] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. |
| Workload: | The workload is 600h. |

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| Data: | MFALCA. MA. Nr. / Examination number: 62402 | Version: 15.07.2016  | Start Year: SoSe 2017 |
| Module Name: | Material Flow Analysis and Life Cycle Assessment | | |
| (English): | Material Flow Analysis and Life Cycle Assessment | | |
| Responsible: | Fröhling, Magnus / Prof. | | |
| Lecturer(s): | Fröhling, Magnus / Prof. | | |
| Institute(s): | Professor of Ressourcemanagement | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>The students</p> <ul style="list-style-type: none"> • analyse material and energy flows from a system's and from a product/service perspective, • use the standardized terminology, • name and describe the steps for conducting MFA & LCA studies, • discuss the achievements and shortcomings of common methodological toolsets and data bases in the field, • gather necessary information, choose suitable methods, and apply these for simple MFA & LCA studies, and • discuss the quality of material flow analysis studies and life cycle assessment studies. | | |
| Contents: | <ul style="list-style-type: none"> • Systems and life cycle thinking • Material flow networks • Material and energy flow balancing • Material flow modelling • Life Cycle Assessment <ul style="list-style-type: none"> ◦ Goal and Scope definition ◦ Life Cycle Inventories (LCI) ◦ Life Cycle Impact Assessment (LCIA) ◦ Interpretation and Disclosure • Current trends and developments • Software systems and data bases for material flow analysis and life cycle assessment • Case studies | | |
| Literature: | <ol style="list-style-type: none"> 1. Baccini & Brunner (2012): Metabolism of the Anthroposphere: Analysis, Evaluation, Design, MIT Press 2. Brunner/Rechberger (2004): Practical handbook of material flow analysis, Lewis 3. Guinée (2002): Handbook on Life Cycle Assessment, Kluwer 4. Hauschild/ Huijbregts (2015): Life Cycle Impact Assessment (LCA Compendium - The Complete World of Life Cycle Assessment), Springer 5. Klöpfer, W. (2014): Background and Future Prospects in Life Cycle Assessment, Springer 6. EU International Reference Life Cycle Data System (ILCD) Handbook Series 7. Journals: <ol style="list-style-type: none"> a. International Journal of Life Cycle Assessment b. Journal of Cleaner Production c. Journal of Industrial Ecology <p>Further literature recommendations will be given in the lecture.</p> | | |
| Types of Teaching: | S1 (SS): Material Flow Analysis and Life Cycle Assessment (lecture) - Material Flow Analysis and Life Cycle Assessment (lecture) / Lectures (2 | | |


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| | SWS) S1 (SS): Material Flow Analysis and Life Cycle Assessment (tutorial) - Material Flow Analysis and Life Cycle Assessment (tutorial) / Exercises (2 SWS) |
| Pre-requisites: | |
| Frequency: | yearly in the summer semester |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: AP*: Assignment KA [90 min] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP*: Aufgabe KA [90 min] * Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein. |
| Credit Points: | 6 |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): AP*: Assignment [w: 1] KA [w: 4] * In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively. |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. |

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| Data: | FÖTEE. MA. Nr. 3625 / Examination number: 44402 | Version: 19.09.2017  | Start Year: SoSe 2019 |
| Module Name: (English): | Materials Handling | | |
| Responsible: | Mütze, Thomas / Dr.-Ing. Lieberwirth, Holger / Prof. Dr.-Ing. | | |
| Lecturer(s): | | | |
| Institute(s): | Institute of Mechanical Process Engineering and Mineral Processing Institute of Mineral Processing Machines | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Starting out from the methods of material characterization and the fundamentals of the different processes, the students acquire competences regarding the possibilities of various conveying techniques (pneumatic, hydraulic, mechanical conveying), the associated machines / apparatuses and the calculation and design of selected conveyors and conveying systems for mineral, renewable raw materials and waste. | | |
| Contents: | Possibilities and methods of bulk material characterization, process basics, classification, calculation and design of selected conveyors (pneumatic, hydraulic, mechanical) as well as design of conveyor systems (for example in the processing of primary and secondary raw materials as well as waste). | | |
| Literature: | Wolfgang Beitz, B.J. Davies, Karl-Heinz Küttner, Heinrich Dubbel, DUBBEL - Handbook of Mechanical Engineering (Englisch) - 28. September 1994 Scheffler, M.: Mechanische Fördermittel und ihre Anwendung für Transport, Umschlag und Lagerung), VEB Fachbuchverlag Leipzig 1984 | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) S1 (SS): Practical exercises and one design exercise / Exercises (1 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: MP/KA (KA if 10 students or more) [MP minimum 30 min / KA 90 min] PVL: At least 90% of the practical exercises are passed successfully. PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: MP/KA (KA bei 10 und mehr Teilnehmern) [MP mindestens 30 min / KA 90 min] PVL: Mindestens 90% der Praktika und der Übungen erfolgreich absolviert. PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 4 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): MP/KA [w: 1] | | |
| Workload: | The workload is 120h. It is the result of 45h attendance and 75h self-studies. The work load is 120h. It is the result of 60h attendance and 60h self-studies. The latter includes the preparation for exercises, practical trainings, and preparation for the exam. | | |


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| Data: | MATSCI. MA. Nr. 2919 / Examination number: 51012 | Version: 08.05.2017  | Start Year: SoSe 2011 |
| Module Name: | Materials Science | | |
| (English): | | | |
| Responsible: | Leineweber, Andreas / Prof. Dr. rer. nat. habil. | | |
| Lecturer(s): | Wetzel, Marius | | |
| Institute(s): | Institute of Materials Science | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Qualification for cooperation with engineers. The student is able to relate problems from engineering practice to fundamental concepts from Materials Science. | | |
| Contents: | The lectures deal with the basics of materials science (structure, classes of materials), the main properties and the application of materials. | | |
| Literature: | 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. | | |
| Types of Teaching: | S1 (SS): Lectures (1 SWS) S1 (SS): Exercises (1 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] | | |
| | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] | | |
| Credit Points: | 3 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. | | |


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| Data: | INTRORME. MA. Nr. 3418 / Examination number: 62008 | Version: 22.01.2020  | Start Year: WiSe 2016 |
| Module Name: | Methods of Analysis and Econometrics | | |
| (English): | | | |
| Responsible: | Stephan, Johannes / Prof. Dr. | | |
| Lecturer(s): | Stephan, Johannes / Prof. Dr. | | |
| Institute(s): | Professor of International Resource Policy and Economic Development | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students acquire the ability to evaluate and understand analysis of business data and markets. Students learn how to read business-related research in a critical way and are introduced to the most important methods of analysis. This allows students to distinguish between business propaganda and the creation and use of general knowledge, and also implicitly helps to inform the overall learning process. | | |
| Contents: | <p>The general part of the module introduces the students to the ideas of critical evaluation of analyses. This includes familiarity with the properties of a wide range of different business data (intra and inter) and other sources of information, as well as the methodology of their use in different kinds of analyses. Students learn to understand the method of deductive research, of falsification, and the rigours of positive and normative analyses. This is wound up into setting the minimum standard rules for sound academic writing. The empirical part focuses on the a critical view on the application of most usual methods of analysis: analysis of properties of data and hypotheses-testing.</p> <p>Part I: Critical view on analysis of business data and markets</p> <p> I.1 Criteria for quality of data</p> <p> I.2 Criteria for sound analysis</p> <p>Part II: Empirical analysis of business data and markets</p> <p> II.1 Understanding statistical analysis</p> <p> II.2 Evaluation of econometric analysis</p> | | |
| Literature: | <p>Blaug, M, 1994, The methodology of economics, Cambridge University Press.</p> <p>Cameron and Trivedi (2005) Microeconometrics - Methods and Applications. Cambridge University Press.</p> <p>Dow, S., 2002, Economic methodology: an enquiry, Oxford University Press.</p> <p>Davis, J.B. and D.W. Hands, 2011, The Elgar Companion to Recent Economic Methodology, Edward Elgar.</p> <p>Lee M.-J., 2005. Micro-Econometrics for Policy, Program and Treatment Effects. Oxford University Press.</p> <p>Johnston J. and J. DiNardo, 1997. Econometric Methods. Mc Graw Hill.</p> <p>Wooldridge J., 2001. Econometric Analysis of Cross Section and Panel Data. MIT Press.</p> | | |
| Types of Teaching: | <p>S1 (WS): Lectures (3 SWS)</p> <p>S1 (WS): Exercises (1 SWS)</p> | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains:</p> <p>KA [90 min]</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst:</p> <p>KA [90 min]</p> | | |
| Credit Points: | 6 | | |


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| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [$w: 1$] |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. |

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| Data: | MCCLR. MA. Nr. 2930 / Examination number: 60705 | Version: 12.04.2013  | Start Year: WiSe 2013 |
| Module Name: (English): | Multicultural Communication, Language and Rhetoric | | |
| Responsible: | Hinner, Michael B. / Prof. Dr. | | |
| Lecturer(s): | Hinner, Michael B. / Prof. Dr. | | |
| Institute(s): | Professor of Business English, Business Communication and Intercultural Communication | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The module seeks to transmit, on the one hand, how scientific papers are researched, written, and presented in academic English. And, on the other hand, how culture influences human communication and behavior. | | |
| Contents: | <p>The module consists of two courses and is structured as follows:</p> <p>1. Scholarly Rhetoric: The participants learn how to research, write, present, and discuss a scientific paper. To that end, the following topics will be addressed: Academic style and ethics; formulating research questions and hypotheses; quantitative, qualitative, experimental research, field studies, and content analysis methods; measurement in communication research; paper content; style and layout; documenting sources; writing abstracts and summaries; editing; presentations; discussions.</p> <p>2. Intercultural Communication: The lecture focuses on the following topics: Culture, supraculture, macroculture, microculture; the perceptual process, description, interpretation, and evaluation; ethnocentrism, stereotypes, and prejudice; belief systems, values, and attitudes; culture and communication; culture and identity; culture shock; intercultural competence.</p> | | |
| Literature: | Scripts will be sold at the beginning of each course; Hinner, M. B. Ed. (2007, 2010). Freiburger Beiträge zur interkulturellen und Wirtschaftskommunikation, Volume 4 and 7. Frankfurt/M: Peter Lang. Additional readings will be based on the selected topics for the assignments and include various books, journals, and electronic sources. | | |
| Types of Teaching: | S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: Abitur-level English, or equivalent knowledge of English. | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: KA* [90 min] AP*: Written assignment AP*: Presentation</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA* [90 min] AP*: Belegarbeit AP*: Präsentation</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0)</p> | | |


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| | bewertet sein. |
| Credit Points: | 6 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w):</p> <p>KA* [w: 5] AP*: Written assignment [w: 4] AP*: Presentation [w: 1]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | <p>The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-study includes preparation and follow-up work for in-class instruction as well as preparation for and completion of the written assignment, the formal presentation as well as the written exam, i.e. "Klausurarbeit."</p> |

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| Data: | OPMAN. MA. Nr. 2970 / Examination number: 61304 | Version: 06.07.2015  | Start Year: WiSe 2016 |
| Module Name: | Operations Management | | |
| (English): | | | |
| Responsible: | Höck, Michael / Prof. Dr. | | |
| Lecturer(s): | Höck, Michael / Prof. Dr. | | |
| Institute(s): | Professor of Industrial Management, Production Management and Logistics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Foremost, the module aims to convey to the student problem-solving competencies with a view to putting the student in a position to analyse the complex questions in operations management, to structure them, and to develop solution alternatives. | | |
| Contents: | This course addresses the management of operations in manufacturing and service firms. Diverse activities, such as determining the size and type of production process, purchasing the appropriate raw materials, planning and scheduling the flow of materials and the nature and content of inventories, assuring product quality, and deciding on the production hardware and how it gets used, comprise this function of the company. Managing operations well requires both strategic and tactical skills. During the term, we will consider such topics as: process analysis, workforce issues, materials management, quality and productivity, technology, and strategic planning, together with relevant analytical techniques. This course will provide a survey of these issues. | | |
| Literature: | Davis, M. & Heineke, J. (2005): Operations Management, 5/e, McGraw-Hill Cachon & Terwiesch (2006): Matching Supply and Demand, McGraw-Hill Stevenson (2007): Operations Management, 9/e, McGraw-Hill. | | |
| Types of Teaching: | S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: None | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] PVL: Case Studies PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Fallstudien PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-study consists of preparation and review of the lectures, independent work on case studies, as well as preparation for the written test. | | |


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| Data: | OREDEP. MA. Nr. 2915 / Examination number: 31201 | Version: 28.04.2010  | Start Year: SoSe 2011 |
| Module Name: | Ore Deposits & Economic Geology | | |
| (English): | | | |
| Responsible: | Seifert, Thomas / Prof. Dr. | | |
| Lecturer(s): | Seifert, Thomas / Prof. Dr. | | |
| Institute(s): | Institute of Mineralogy | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | 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. | | |
| Contents: | An introduction to ore-forming environments. Major case studies of ore and industrial mineral deposits will also be discussed. An integral part of the course is the study of hand specimens. | | |
| Literature: | 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. | | |
| Types of Teaching: | S1 (SS): Lectures (1 SWS) S1 (SS): Exercises (1 SWS) | | |
| Pre-requisites: | Recommendations: No requirements. | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] | | |
| Credit Points: | 3 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. | | |

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| Data: | ORGGCOMM. MA. Nr. 3366 / Examination number: 60709 | Version: 14.02.2017  | Start Year: SoSe 2013 |
| Module Name: | Organizational Communication | | |
| (English): | | | |
| Responsible: | Hinner, Michael B. / Prof. Dr. | | |
| Lecturer(s): | Hinner, Michael B. / Prof. Dr. | | |
| Institute(s): | Professor of Business English, Business Communication and Intercultural Communication | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The module seeks to transmit the theoretical foundation for organizational communication and apply it in a real world context (e.g. the resource industry, engineering, etc.) to see how effective internal and external communication can transmit competence, credibility, and ethics to all essential stakeholders within and without organizations as well as the public at large. | | |
| Contents: | <p>The module consists of one lecture and one tutorial and is structured as follows:</p> <ol style="list-style-type: none"> 1. The lecture focuses on the following communication topics: Organizational communication theory, social components of communication, social networks, diversity and communication, identity, corporate culture and communication, power and communication, negotiation, attitudes, and persuasion, conflict communication, internal and external communication, formal and informal communication, stakeholder communication, crisis communication, globalization, technology and communication. 2. The tutorial integrates the above topics into an applied context (e.g. the resource industry, engineering, etc.). Participants will analyze and discuss the topics and contexts in small groups and present the results informally and formally throughout the semester. <p>The module is taught in English and the assignments have to be completed in English.</p> | | |
| Literature: | <p>Conrad, C., & Poole, M.S. (2002). Strategic organizational communication, Fort Worth: Harcourt. Hinner, M.B., Ed. (2007, 2010). Freiburger Beiträge zur interkulturellen und Wirtschaftskommunikation, Volume 3 and 6. Frankfurt am Main: Peter Lang. Keyton, J. (2005). Communication and organizational culture: A key to understanding work experiences. Thousand Oaks: Sage. May, S., & Mumby, D.K. (2005). Engaging organizational communication theory and research. Thousand Oaks: Sage.</p> | | |
| Types of Teaching: | <p>S1 (SS): Lectures (2 SWS) S1 (SS): Exercises (2 SWS)</p> | | |
| Pre-requisites: | Recommendations: Abitur-level English, or equivalent knowledge of English. | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: KA* [90 min] AP*: Active participation, as well as assignments in the module</p> | | |


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| | <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA* [90 min] AP*: Aktive Teilnahme, sowie Belegarbeiten in der Veranstaltung</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> |
| Credit Points: | 6 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w): KA* [w: 4] AP*: Active participation, as well as assignments in the module [w: 1]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | <p>The workload is 180h. It is the result of 60h attendance and 120h self-studies. Self-study time includes reading the relevant literature, preparation and follow-up work for in-class participation as well as preparation time for the written exam, i.e. "Klausurarbeit" and the assignments.</p> |

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| Data: | OMIS. MA. Nr. 3202 / Examination number: 62101 | Version: 11.01.2017  | Start Year: WiSe 2010 |
| Module Name: | Project Management | | |
| (English): | | | |
| Responsible: | Jacob, Dieter / Prof. Dr. | | |
| Lecturer(s): | Müller, Clemens / Master | | |
| Institute(s): | Professor of Construction Management | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | Students obtain an understanding of the concept of project management and become familiar with important tasks in relation to the management of projects. | | |
| Contents: | This course presents the principles and techniques of managing projects, primarily engineering projects, from the owner's feasibility study through design and development to completion. It emphasises project management during the early stages of project development because it is at that point that the ability to influence the quality, cost and time of a project is at its highest. It includes project scope definition, development of work plan, planning and scheduling, procurement strategies and highlights the management of the three basic components of a project: quality/scope, budget/cost and time/schedule. A simulation exercise is included to demonstrate working in a group and highlight the importance of communication against a backdrop of determining procurement strategy. | | |
| Literature: | <ul style="list-style-type: none"> • Schelle, Heinz/ Ottmann, Roland/ Pfeiffer, Astrid: Project Manager. German Association for Project Management (GPM), Member of the International Project Management Association (IPMA), 2006. • Kerzner, Harold: Project Management – A Systems Approach to Planning, Scheduling, and Controlling, associated with the Project Management Institute (PMI), 11th Ed, 2013. • The Chartered Institute of Building – Project Management for Construction and Development, 2014. • Klee, Lukas: International Construction Contract Law, 1st Ed, 2014. • Peter W.G. Morris/ George H. Hough – The Anatomy of Major Projects: A Study of the Reality of Project Management. London, 1987. • Merrow, Edward W. – Industrial Megaprojects: Concepts, Strategies, and Practices for Success. New Jersey, 2011. • Köchendorfer, Bernd; Liebchen, Jens; Viering, Markus G.: Bau-Projektmanagement: Grundlagen und Vorgehensweisen, 4th Ed, 2010. • Berner, Fritz; Kochendorfer, Bernd; Schach, Rainer: Grundlagen der Baubetriebslehre 2 – Baubetriebsplanung, 2nd Ed, 2014 • Uher, Thomas; Adam, Zantis; Zantis: Programming and Scheduling Techniques, 2nd Ed, 2011. • Vanhoucke, Mario: Project Management with Dynamic Scheduling – Baseline Scheduling, Risk Analysis and Project Control, 2nd Ed, 2013. • Jacob, Dieter; Müller, Clemens: Estimating in Heavy Construction: Roads, Bridges, Tunnels, Foundations, 1st Ed, 2016. | | |
| Types of Teaching: | S1 (WS): Exercises (1 SWS) S1 (WS): Lectures (1 SWS) | | |
| Pre-requisites: | Recommendations: | | |

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| | No pre-requisites are required. |
| Frequency: | yearly in the winter semester |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] |
| | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] |
| Credit Points: | 3 |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. |

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| Data: | BBREKL. MA. Nr. 2087 / Examination number: 31719 | Version: 13.07.2014  | Start Year: SoSe 2014 |
| Module Name: | Reclamation | | |
| (English): | | | |
| Responsible: | Drebenstedt, Carsten / Prof. Dr. | | |
| Lecturer(s): | Drebenstedt, Carsten / Prof. Dr. | | |
| Institute(s): | Institute of Mining and Special Civil Engineering | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | The module provides the development of expertise and methodological skills in the field of mining engineering. The students learn the theory and practice of reclamation in mining as essential element of balance for mining impacts. They understand the parallelism of mine and reclamation planning and the fact, why reclamation can exceed the mine project phase. Additionally the students will be qualified to explain scientifically reclamation measures, plan technical measures and calculate the financial expenses. | | |
| Contents: | <ul style="list-style-type: none"> • Impacts of mining and its effects • Legal requirements for permission • Scientific fundamentals of reclamation (soil, ground water balance,...) • Concepts • Utilization requirements and realization in the post-mining landscaping (agriculture, forestry, waterbodies, nature protection, recreation, miscellaneous) • Case studies | | |
| Literature: | Pflug (Hrsg.), 1998, Braunkohlentagebau und Rekultivierung, Springer Verlag Olschowy, Bergbau und Landschaft, 1993, Paray Verlag Gilscher, Bruns, 1999, Renaturierung von Abbaustellen, Verlag Eugen Ulmer Stuttgart | | |
| Types of Teaching: | S1 (SS): Lectures (3 SWS) S1 (SS): Exercises (2 SWS) S1 (SS): Practical Application (1 SWS) | | |
| Pre-requisites: | Recommendations: Mathematical-scientific fundamentals | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: MP/KA (KA if 21 students or more) [MP minimum 30 min / KA 60 min] PVL: Submission and positive evaluation of module exercises PVL: Participation in 2 excursions of the chair Surface-Mining PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: MP/KA (KA bei 21 und mehr Teilnehmern) [MP mindestens 30 min / KA 60 min] PVL: Erfolgreicher Abschluss der Übungsaufgaben PVL: 2 Fachexkursionen Tagebau PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): MP/KA [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 90h attendance and 90h self- | | |


studies. Self-study includes autonomous and instructed preparation and performance of follow-up course work and examination preparation.

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| Data: | RESMGT. MA. Nr. 2082 / Examination number: 62407 | Version: 31.05.2018  | Start Year: WiSe 2016 |
| Module Name: | Resource Management | | |
| (English): | | | |
| Responsible: | Fröhling, Magnus / Prof. | | |
| Lecturer(s): | Fröhling, Magnus / Prof. | | |
| Institute(s): | Professor of Ressourcemanagement | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>Students</p> <ul style="list-style-type: none"> • explain the resource related corporate management tasks, structure these, • use selected tools and methods and • explain the interplay between resource management and related tasks such as operations and supply chain management. | | |
| Contents: | <p>The course deals with the field of resource management from an industrial perspective. This comprises resource related management tasks, methods and tools to solve these and how they are embedded within functions and processes of companies. Thereby the focus lies on repetition factors mineral raw materials and energy carriers, renewable raw materials and energy carriers as well as secondary raw materials and energy carriers.</p> | | |
| Literature: | <ul style="list-style-type: none"> • Bausch (2009): Handbook Utility Management, Springer • Thiede (2012): Energy Efficiency in Manufacturing Systems, Springer • Thonemann (2015): Operations Management, Pearson • Vrat (2014): Materials Management, Springer • Wagner, Enzler (2006) Material Flow Management, Physica | | |
| Types of Teaching: | <p>S1 (WS): Lectures (2 SWS) S1 (WS): Exercises (2 SWS)</p> | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam. The module exam contains: AP*: Case study with oral presentation KA* [90 min]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP*: Fallstudie mit mdl. Präsentation KA* [90 min]</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> | | |
| Credit Points: | 6 | | |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w): AP*: Case study with oral presentation [w: 1] KA* [w: 4]</p> <p>* In modules requiring more than one exam, this exam has to be passed</p> | | |

or completed with at least "ausreichend" (4,0), respectively.

Workload:


The workload is 180h. It is the result of 60h attendance and 120h self-studies.


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| Data: | SSSE. MA. Nr. 3653 / Examination number: 43112 | Version: 24.09.2018  | Start Year: WiSe 2018 |
| Module Name: | Selective Separation of Strategic Elements | | |
| (English): | | | |
| Responsible: | Bräuer, Andreas / Prof. Dr.-Ing. | | |
| Lecturer(s): | Haseneder, Roland / Dr. rer. nat. | | |
| Institute(s): | Institute of Thermal, Environmental and Natural Products Process Engineering | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | On completion of the course the student shall be able to explain membrane technology and the different applications like extraction and membrane assisted processes regarding the separation of value products. Focus is put on strategic elements. They can use their physico-chemical knowledge on membrane separation, development of hybrid operation systems and the influences for practical applications and are familiar with the methods and problems related to separation devices. Due to the seminar the students will be able to discuss the current literature on the topic. | | |
| Contents: | <ul style="list-style-type: none"> • membranes, modules, hybrid processes • driving forces, transport resistances • structures, materials • mass transfer • module construction • MF, UF, NF, RO • standard applications • scaling, fouling effects • special applications: mine water treatment, leaching solutions, resourcerecovery • internship to membrane processes | | |
| Literature: | Heinrich Strathmann: Introduction to Membrane Science and Technology, Wiley-VCH, 2011 Anil K. Pabby, Syed S.H. Rizvi, Ana Maria Sastre Requena: Handbook of Membrane Separations, CRC-Press 2008 | | |
| Types of Teaching: | S1 (WS): Lectures (2 SWS) S1 (WS): Seminar (1 SWS) S1 (WS): Practical Application (1 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] | | |
| | Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] | | |
| Credit Points: | 5 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 150h. It is the result of 60h attendance and 90h self-studies. | | |

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| Data: | SIR. MA. Nr. 2911 / Examination number: 62404 | Version: 14.07.2016 | Start Year: SoSe 2017 |
| Module Name: | Strategies of the Resource Industry | | |
| (English): | | | |
| Responsible: | Fröhling, Magnus / Prof. | | |
| Lecturer(s): | Bartz, Stefan | | |
| Institute(s): | Professor of Ressourcemanagement | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <ul style="list-style-type: none"> • Understand the strategic role of valuations for the resource industry (energy and mining) • Learn basic valuation concepts and their practical application in energy and mining (examples based on real cases) • Transform verbal description of a real business case into a financial model (case studies based on simplified real business cases) <p>Know recent developments of valuation in the relevant industries (e.g. real options, simulations, etc.)</p> | | |
| Contents: | <ul style="list-style-type: none"> • Context of valuation and strategy development • Case history of a typical metal mine (example) • Economical characteristics of mining and energy businesses • Types of valuations for energy and mining businesses, valuation objects and subjects, staged approach for studies • Input data for valuations, availability to different stakeholders, brainstorming exercises • Role of value chains and industry cost curves for valuation, commodity-like goods and market imperfections (gold, coal, copper, power) • Wholesale power markets, merit order, influence of CO2 emissions trading and renewables (examples) • Application of basic P&L / CF statements for valuations (examples) • Traditional investment decision criteria (NPV, IRR, LAC, LAR, Payback) • Financing models and hurdle rates (examples) • Instruments for the analysis of uncertainty and risk in valuations, exercise "country risk" • Binary decision trees in exploration (example gold) • Real options: Example gas-fired power plant <p>Case study: Prepare evaluation of a business plan and presentation.</p> | | |
| Literature: | Wellmer, F.-W., Dalheimer, M., Wagner, M. (2008): Economic Evaluations in Exploration, Springer Berlin Heidelberg New York. Rudenno, V. (2012): The Mining Valuation Handbook: Mining and Energy Valuation for Investors and Management, 4th Edition, Wiley, New Jersey. Narbel, P., Hanssen, J.P., Lien, J.R. (2014): Energy Technologies and Economics, Springer Berlin Heidelberg New York. | | |
| Types of Teaching: | S1 (SS): Lectures (1 SWS) S1 (SS): Exercises (1 SWS) | | |
| Pre-requisites: | Recommendations: To take part in the module „Strategies of the Resource Industry“, it is strongly recommended that the student has prior knowledge of microeconomics and investment and finance. If this is not the case, the | | |

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| | student is responsible to make himself familiar with the necessary knowledge. |
| Frequency: | yearly in the summer semester |
| Requirements for Credit Points: | <p>For the award of credit points it is necessary to pass the module exam.</p> <p>The module exam contains: AP*: Group Work KA* [120 min]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> <p>Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: AP*: Gruppenarbeit KA* [120 min]</p> <p>* Bei Modulen mit mehreren Prüfungsleistungen muss diese Prüfungsleistung bestanden bzw. mit mindestens "ausreichend" (4,0) bewertet sein.</p> |
| Credit Points: | 3 |
| Grade: | <p>The Grade is generated from the examination result(s) with the following weights (w): AP*: Group Work [w: 0] KA* [w: 1]</p> <p>* In modules requiring more than one exam, this exam has to be passed or completed with at least "ausreichend" (4,0), respectively.</p> |
| Workload: | The workload is 90h. It is the result of 30h attendance and 60h self-studies. |

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| Data: | SCM. MA. Nr. 937 / Examination number: 61305 | Version: 06.07.2015 | Start Year: SoSe 2016 |
| Module Name: | Supply Chain Management | | |
| (English): | | | |
| Responsible: | Höck, Michael / Prof. Dr. | | |
| Lecturer(s): | Höck, Michael / Prof. Dr. | | |
| Institute(s): | Professor of Industrial Management, Production Management and Logistics | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | In this course students will view the supply chain from the point of view of a general manager. Logistics and supply chain management is all about managing the hand-offs in a supply chain - hand-offs of either information or product. The design of a logistics system is critically linked to the objectives of the supply chain. Our goal in this course is to understand how logistical decisions impact the performance of the firm as well as the entire supply chain. The key will be to understand the link between supply chain structures and logistical capabilities in a firm or supply chain. | | |
| Contents: | Supply Chain Management (SCM) deals with the planning, implementing and controlling of efficient flow and storage of raw materials, in-process inventory, finished goods, and related information from point of origin to point of consumption. Issues discussed in the course will include the total logistics cost approach, supply chain network design and optimizing the overall performance. Effective logistics systems aim towards coordination of transportation, inventory positioning and supply contracts to provide quick service efficiently. | | |
| Literature: | Chopra, S.; Meindl, P. (2006): Supply Chain Management, 3rd Ed., Pearson Prentice Hall, New York. Cachon, G.; Terwiesch, C. (2006): Matching Supply with Demand, McGraw-Hill, Boston. | | |
| Types of Teaching: | S1 (SS): Lectures (2 SWS) S1 (SS): Exercises (2 SWS) | | |
| Pre-requisites: | Recommendations: Keine | | |
| Frequency: | yearly in the summer semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: KA [90 min] PVL: Case Studies PVL have to be satisfied before the examination. Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: KA [90 min] PVL: Fallstudien PVL müssen vor Prüfungsantritt erfüllt sein bzw. nachgewiesen werden. | | |
| Credit Points: | 6 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): KA [w: 1] | | |
| Workload: | The workload is 180h. It is the result of 60h attendance and 120h self-studies. Letzteres umfasst Vor- und Nachbereitung der Vorlesungen, die selbständige Bearbeitung von Fallstudien sowie die Vorbereitung auf die Klausur. | | |

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| Data: | THT. MA. Nr. / Examination number: 41215 | Version: 29.08.2017  | Start Year: WiSe 2018 |
| Module Name: | Thermodynamics and Heat Transfer | | |
| (English): | | | |
| Responsible: | Fieback, Tobias / Prof. Dr. Ing. | | |
| Lecturer(s): | Fieback, Tobias / Prof. Dr. Ing. | | |
| Institute(s): | Institute of Thermal Engineering | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <ul style="list-style-type: none"> - knowledge of basic thermodynamic principles - applying of those principles to beginner level thermodynamic processes - getting a brief understanding of heat and mass transfer processes | | |
| Contents: | <ul style="list-style-type: none"> - Fundamentals of thermodynamics (equations of state, reversible processes, system boundaries) - First and second law of thermodynamics - Thermodynamic properties of pure fluid substances - Thermodynamic investigation of cycle processes (carnot, clausius-rankine, ...) - Thermodynamics of simple mixtures (humid air) - Basic introductions to heat and mass transfer processes | | |
| Literature: | <ul style="list-style-type: none"> - The Laws of Thermodynamics: A Very Short Introduction; Peter W. Atkins (just for getting started) - Thermodynamik: Grundlagen und technische Anwendungen; H.D. Baehr / S. Kabelac (German) - VDI-Wärmeatlas (Thermodynamic Properties in German) | | |
| Types of Teaching: | S1 (WS): Lecture / Lectures (1 SWS) S1 (WS): Exercise / Exercises (2 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: MP/KA (KA if 10 students or more) [MP minimum 40 min / KA 120 min] Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: MP/KA (KA bei 10 und mehr Teilnehmern) [MP mindestens 40 min / KA 120 min] | | |
| Credit Points: | 4 | | |
| Grade: | The Grade is generated from the examination result(s) with the following weights (w): MP/KA [w: 1] | | |
| Workload: | The workload is 120h. It is the result of 45h attendance and 75h self-studies. | | |

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| Data: | TPT. BA. Nr. / Examination number: 40316 | Version: 21.08.2017  | Start Year: WiSe 2019 |
| Module Name: | Training in Particle Technology | | |
| (English): | | | |
| Responsible: | Peuker, Urs Alexander / Prof. Dr.-Ing. | | |
| Lecturer(s): | Mitarbeiter des Institutes MVT/AT Peuker, Urs Alexander / Prof. Dr.-Ing. | | |
| Institute(s): | Institute of Mechanical Process Engineering and Mineral Processing | | |
| Duration: | 1 Semester(s) | | |
| Competencies: | <p>The module aims at recalling the fundamentals of particle technology. It is set up using special exercises to practice scientific and technological calculations of particle size distributions and fundamental micro-processes. The principles of the mechanical micro-processes are introduced.</p> <p>The exercises also apply the fundamental approaches (micro-processes) to describe and to design process equipment. This will be done using case studies.</p> | | |
| Contents: | <p>Particle characterization Particle size distribution Mixing of particle size distributions Separation of particle size distributions (classification) Grade recovery curves Micro processes in particle technology</p> <ul style="list-style-type: none"> • Particles in flow-fields (i.e. sedimentation) • Flow through porous media • Particle-particle interactions (e.g. van-der-Waals-forces, electrostatic interactions, DLVO-theory, capillary forces) • Breakage laws (i.e. breakage energy) <p>Selected case studies form the fields:</p> <ul style="list-style-type: none"> • Filtration • Sedimentation • Agglomeration • Classification • Comminution • And others | | |
| Literature: | M. Stieß: Mechanische Verfahrenstechnik 1 - Partikeltechnologie, Springer-Verlag, Berlin, Heidelberg, 2009 H. Schubert: Handbuch der Mechanischen Verfahrenstechnik, Wiley-VCH, Weinheim, 2003 selected scientific papers | | |
| Types of Teaching: | S1 (WS): Recall of fundamentals / Lectures (1 SWS) S1 (WS): Application of fundamentals - case studies / Exercises (2 SWS) | | |
| Pre-requisites: | | | |
| Frequency: | yearly in the winter semester | | |
| Requirements for Credit Points: | For the award of credit points it is necessary to pass the module exam. The module exam contains: MP/KA (KA if 8 students or more) [MP minimum 30 min / KA 120 min] Voraussetzung für die Vergabe von Leistungspunkten ist das Bestehen der Modulprüfung. Die Modulprüfung umfasst: MP/KA (KA bei 8 und mehr Teilnehmern) [MP mindestens 30 min / KA 120 min] | | |
| Credit Points: | 4 | | |

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| Grade: | The Grade is generated from the examination result(s) with the following weights (w): MP/KA [w: 1] |
| Workload: | The workload is 120h. It is the result of 45h attendance and 75h self-studies. |

Freiberg, den 14. Juli 2020

gez.
Prof. Dr. Klaus-Dieter Barbknecht
Rektor

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