

# Amtliches Mitteilungsblatt



Wirtschaftswissenschaftliche Fakultät

## Fachspezifische Studien- und Prüfungsordnung für den Masterstudiengang Volkswirtschaftslehre

Überfachlicher Wahlpflichtbereich für andere  
Masterstudiengänge

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Herausgeber: Die Präsidentin der Humboldt-Universität zu Berlin  
Unter den Linden 6, 10099 Berlin

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# Fachspezifische Studienordnung für den Masterstudiengang „Volkswirtschaftslehre“

Gemäß § 17 Abs. 1 Ziffer 3 der Verfassung der Humboldt-Universität zu Berlin in der Fassung vom 24. Oktober 2013 (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 47/2013) hat der Fakultätsrat der Wirtschaftswissenschaftlichen Fakultät am 25. Mai 2016 die folgende Studienordnung erlassen\*:

- § 1 Anwendungsbereich
- § 2 Beginn des Studiums
- § 3 Ziele des Studiums
- § 4 Module des Studiums
- § 5 Module für den überfachlichen Wahlpflichtbereich anderer Masterstudiengänge
- § 6 In-Kraft-Treten

Anlage 1: Modulbeschreibungen  
Anlage 2: Idealtypischer Studienverlaufsplan

## § 1 Anwendungsbereich

Diese Studienordnung enthält die fachspezifischen Regelungen für den Masterstudiengang Volkswirtschaftslehre. Sie gilt in Verbindung mit der fachspezifischen Prüfungsordnung für den Masterstudiengang Volkswirtschaftslehre und der Fächerübergreifenden Satzung zur Regelung von Zulassung, Studium und Prüfung (ZSP-HU) in der jeweils geltenden Fassung.

## § 2 Beginn des Studiums

Das Studium kann zum Wintersemester aufgenommen werden.

## § 3 Ziele des Studiums

(1) Ziel des Masterstudiums als zweitem berufsqualifizierendem Abschluss für das Gebiet der Volkswirtschaftslehre ist es, auf eine forschungsorientierte quantitativ-analytische Tätigkeit im volkswirtschaftlichen Umfeld vorzubereiten bzw. die Basis für eine ebenso ausgerichtete Promotion zu legen.

Die Ziele und Inhalte des Studiums sind:

- Die Vermittlung fortgeschrittener fachlicher Kenntnisse, Fähigkeiten und Methoden in der Volkswirtschaftslehre mit dem Ziel, verantwortliche Aufgaben zu übernehmen und zur Lösung komplexer wirtschaftlicher Probleme beizutragen.
- Ein forschungs- und anwendungsorientiertes Entwickeln eigener Ideen, wobei hierfür die Vermittlung eines detaillierten und kritischen

Verständnisses des neuesten Wissensstands in ausgewählten Spezialbereichen der Volkswirtschaftslehre die Grundlage darstellt.

- Die Befähigung der Studierenden, wissenschaftliche Methoden selbstständig anzuwenden, um komplexe wirtschaftliche Probleme zu erfassen, zu analysieren und wissenschaftlich fundierte Entscheidungen zu treffen sowie forschungs- oder anwendungsorientierte Projekte durchzuführen.
- Vermitteln von Informationen, Beweggründen und Schlussfolgerungen gegenüber Fachvertreterinnen und Fachvertretern und Laien; Internationaler Austausch auf wissenschaftlichem Niveau auch im interdisziplinärem Rahmen und Übernehmen herausgehobener Verantwortung.
- Die Befähigung zum lebenslangen Lernen und zur Teamarbeit.

(2) Der erfolgreiche Abschluss des Studiums qualifiziert für eine berufliche Tätigkeit in Wirtschaft, Wissenschaft oder Verwaltung.

## § 4 Module des Studiums

Der Masterstudiengang Volkswirtschaftslehre beinhaltet folgende Module im Umfang von insgesamt 120 LP:

### (a) Pflichtbereich (32 LP)

8.2: Econometric Methods (12 LP)  
Masterarbeit (20 LP)

### (b) Fachlicher Wahlpflichtbereich (78 LP)

#### Bereich A: Mikro- und Makroökonomie

Es sind Module im Umfang von 12 LP zu wählen. Folgende Module stehen zur Auswahl:

- 100: Introduction to Advanced Microeconomic Analysis (6 LP) oder
- 101: Advanced Microeconomic Theory I (PhD-level) (6 LP)
- und
- 102: Introduction to Advanced Macroeconomic Analysis (6 LP) oder
- 103: Advanced Macroeconomic Analysis I (PhD-level) (6 LP)

#### Bereich B: Volkswirtschaftslehre

Es sind Module im Umfang von 18 LP zu wählen. Folgende Module stehen zur Auswahl:

- 104: Advanced Monetary Economics (6 LP)
- 105: Advanced International Trade: Theory and Empirics (6 LP)
- 106: Competition Policy (6 LP)
- 107: Decision-Making under Uncertainty (6 LP)

\* Die Universitätsleitung hat die Studienordnung am 19. Juli 2016 bestätigt.

- 108: Empirical Labor Economics (6 LP)
- 109: Information Economics (6 LP)
- 110: Public Economics (6 LP)
- 111: Advanced Labor Economics (6 LP)

#### Bereich C: Volkswirtschaftslehre und Methodische Grundlagen

Es sind Module der Volkswirtschaftslehre im Umfang von 24 LP zu wählen. Werden im Bereich A mehr als 12 und/oder im Bereich B mehr als 18 LP erfolgreich absolviert, verringert sich die Anzahl der LP entsprechend.

Es ist mindestens ein Modul der Methodischen Grundlagen im Umfang von 6 LP zu wählen. Die Module sind dem Modulkatalog der Wirtschaftswissenschaftlichen Fakultät zu entnehmen.

#### Bereich D: Wirtschaftswissenschaft

Es sind Module im Umfang von 18 LP aus der Wirtschaftswissenschaftlichen Fakultät zu wählen. Werden in den Bereichen A bis C mehr als 60 LP erfolgreich nachgewiesen, verringert sich der Bereich D entsprechend.

Die Module sind dem Modulkatalog der Wirtschaftswissenschaftlichen Fakultät zu entnehmen.

#### Module mit Seminar:

Im fachlichen Wahlpflichtbereich sind mindestens zwei Module mit Seminar nachzuweisen, davon mindestens ein Seminar aus dem Angebot der Wirtschaftswissenschaftlichen Fakultät.

#### (c) Überfachlicher Wahlpflichtbereich (10 LP)

Im überfachlichen Wahlpflichtbereich sind Module aus den hierfür vorgesehenen Modulkatalogen anderer Fächer oder zentraler Einrichtungen im Umfang von insgesamt 10 LP nach freier Wahl zu absolvieren.

10 LP können für ein sechswöchiges Vollzeitpraktikum angerechnet werden. Das Praktikum muss innerhalb des Masterstudiums absolviert werden und ist mit einem Arbeitszeugnis und einem Praktikumsbericht nachzuweisen. Nicht angerechnet werden Sprachkurse in der jeweiligen Muttersprache bzw. Amtssprache des Heimatlandes, Deutschkurse für Ausländer und Englischkurse unter C2-Niveau GER.

### **§ 5 Module für den überfachlichen Wahlpflichtbereich anderer Masterstudiengänge**

Für den überfachlichen Wahlpflichtbereich anderer Masterstudiengänge werden folgende Module angeboten:

ÜWP MA-VWL 1: Introduction to Advanced Microeconomic and Macroeconomic Analysis (10 LP)

### **§ 6 In-Kraft-Treten**

(1) Diese Studienordnung tritt am Tage nach ihrer Veröffentlichung im *Amtlichen Mitteilungsblatt der Humboldt-Universität zu Berlin* in Kraft.

(2) Diese Studienordnung gilt für alle Studentinnen und Studenten, die ihr Studium nach dem In-Kraft-Treten dieser Studienordnung aufnehmen oder nach einem Hochschul-, Studiengangs- oder Studienfachwechsel fortsetzen.

(3) Für Studentinnen und Studenten, die ihr Studium vor dem In-Kraft-Treten dieser Studienordnung aufgenommen oder nach einem Hochschul-, Studiengangs- oder Studienfachwechsel fortgesetzt haben, gilt die Studienordnung vom 5. Dezember 2005 (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 54/2005) übergangsweise fort. Alternativ können sie diese Studienordnung einschließlich der zugehörigen Prüfungsordnung wählen. Die Wahl muss schriftlich gegenüber dem Prüfungsbüro erklärt werden und ist unwiderruflich. Mit Ablauf des 30. September 2019 tritt die Studienordnung vom 5. Dezember 2005 außer Kraft. Das Studium wird dann auch von den in Satz 1 benannten Studentinnen und Studenten nach dieser Studienordnung fortgeführt. Bisherige Leistungen werden entsprechend § 110 ZSP-HU berücksichtigt.

## Anlage 1: Modulbeschreibungen

### Pflichtbereich

	<b>Pflichtmodule</b>	<b>Credits</b>
8.2	Econometric Methods	12

### Fachlicher Wahlpflichtbereich

	<b>Bereich A: Mikro- und Makroökonomie</b>	<b>Credits</b>
100	Introduction to Advanced Microeconomic Analysis <i>oder</i>	6
101	Advanced Microeconomic Theory I (PhD-level)	
102	Introduction to Advanced Macroeconomic Analysis <i>oder</i>	6
103	Advanced Macroeconomic Analysis I (PhD-level)	

	<b>Bereich B: Volkswirtschaftslehre</b>	<b>Credits</b>
104	Advanced Monetary Economics	6
105	Advanced International Trade: Theory and Empirics	6
106	Competition Policy	6
107	Decision-Making under Uncertainty	6
108	Empirical Labor Economics	6
109	Information Economics	6
110	Public Economics	6
111	Advanced Labor Economics	6

(Nicht gewählte Wahlpflichtmodule aus Bereich A und B können wahlweise auch im Bereich C gewählt werden)

	<b>Bereich C: Volkswirtschaftslehre und Methodische Grundlagen</b>	<b>Credits</b>
	<b>Bereich C: Volkswirtschaftslehre</b>	
121	Advanced Macroeconomic Analysis II (PhD-level)	6
122	Topics in Macroeconomics	6
123	Topics in Labor Economics and Macroeconomics	6
130	European Economic History I	6
131	European Economic History II	6
132	Economic History	6
133	Spatial Economics	6
134	From Paul A. Samuelson to Elinor Ostrom - History of Economic Thought in the 20th Century	6
140	Selected Topics in Industrial Organization	6
150	Advanced Microeconomics	6
151	Behavioral Economics	6
152	Empirical Methods in Applied Microeconomics	6
153	Advanced Experimental Economics	6
154	Trust and Reputation	6
155	Advanced Microeconomic Theory II (PhD-level)	6
160	Theory of Incentives	6
161	Game Theory	6
162	Topics in Microeconomics	
170	Social Preferences	6
171	Seminar in Public Economics	6
172	Topics in Public Economics	6
180	Economic Growth	6
190	Emerging Markets	6
201	Selected Topics in Economics	6

	<b>Bereich C: Methodische Grundlagen</b>	<b>Credits</b>
8.1	Applied Econometrics	6
80	Time Series Analysis	6
81	Analysis of Panel Data	6
82	Microeconometrics	6
83	Advanced Econometrics	6
84	Estimation of Treatment Effects	6
85	Econometric Projects	6
86	Selected Topics in Econometrics	6
9	Multivariate Statistical Analysis	6
90	Statistical Programming Languages	6
91	Datenanalyse I	6
92	Datenanalyse II	6
93	Statistics of Financial Markets	6
94	Advanced Methods in Quantitative Finance	6
95	Selected Topics in Finance, Insurance and Mathematical Statistics	6
96	Multivariate Statistics and Non- and Semiparametric Modeling	6
97	Statistical Seminars	6
98	Selected Topics in History of Statistics	6
99	Privatissimum	6
202	Selected Topics in Quantitative Methods	6

Die Modulbeschreibungen folgender Wahlpflichtmodule sind der fachspezifischen Studienordnung für den Masterstudiengang Betriebswirtschaftslehre in der jeweils gültigen Fassung zu entnehmen:

	<b>Bereich C: Methodische Grundlagen</b>	<b>Credits</b>
7	Business Analytics and Data Science	6
70	Digital Marketing and Web Analytics	6
71	Seminar Information Systems	6
72	Applied Predictive Analytics	6
73	IT Security and Privacy	6

	<b>Bereich D: Wirtschaftswissenschaft</b>	<b>Credits</b>
	<b>Accounting Courses</b>	
1	Financial Accounting and Analysis	6
10	Accounting: Valuation	6
11	Accounting: Advanced Topics and Cases in Accounting	6
12	Accounting: Accounting Theory and Earnings Management	6
13	Accounting: Financial Accounting Research Group	6
14	Accounting: Master's Thesis Seminar Accounting	6
2	Grundzüge der Besteuerung	6
20	Umwandlung von Unternehmen	6
21	Steuerwirkungslehre	6
22	Internationale Unternehmensbesteuerung	6
23	Steuerliche Gewinnermittlung / Umsatzsteuer und Verfahrensrecht	6
24	Master Tax Seminar	6
	<b>Marketing</b>	
3	Marketing Management	6
30	Customer Analytics and Customer Insights	6
31	Advanced Marketing Modeling	6
32	Seminar Marketing	6
	<b>Management</b>	
4	Organization and Management	6
40	Personnel Economics	6
41	Advanced Topics in Management	6
42	Incentives in Organizations	6

	<b>Topics in Energy and Network Economics</b>	
45	Financial Contracting	6
46	Network Based Energy Systems	6
47	Competition and Cooperation	6
	<b>Entrepreneurship and Innovation</b>	
5	Economics of Entrepreneurship	6
50	Entrepreneurial and Behavioral Decision Making	6
51	Design of Decision Experiments	6
52	Master Seminar on Entrepreneurship and Innovation	6
	<b>Financial Economics</b>	
6	Corporate Finance	6
60	Advanced Corporate Finance	6
61	Private Equity	6
62	Introduction to Financial Economics	6
63	Case Seminar Advanced Corporate Finance	12
64	Master Thesis Seminar Corporate Finance	6
65	Master Thesis Seminar Financial Economics	6
66.1	Advanced Financial Economics – Corporate Finance	6
66.2	Advanced Financial Economics – Asset Pricing	6
	<b>Finance</b>	
67	Finanzierungstheorie	6
68	Market Microstructure	6
69	Seminar Topics in Finance	6
200	Selected Topics in Business Administration	6

**Überfachlicher Wahlpflichtbereich (üWP) für andere Masterstudiengänge**

	<b>üWP-Module</b>	<b>Credits</b>
ÜWP MA-VWL 1	Introduction to Advanced Microeconomic and Macroeconomic Analysis	10

**Pflichtbereich**

<b>Modul 8.2: Econometric Methods</b>		<b>Credits: 12</b>	
<p><u>Learning objectives:</u></p> <p>The students have a solid knowledge of the econometric methodology including the fundamental role of economic and statistical assumptions. In particular, they have a deep understanding of the ingredients of estimation and inference in the linear regression model and its extensions with matrix algebra. They are familiar with the basic concepts of asymptotic theory and are able to apply them within the context of least squares, maximum likelihood and instrumental variable estimation. The students are equipped with the necessary knowledge to understand and evaluate current research as well as to successfully address own research questions.</p>			
<p>Preconditions: basic knowledge equivalent to module "Introduction to Econometrics" (Bachelor)</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Econometric Methods	<p><u>4 SWS</u></p> <p><u>180 hours</u></p> <p>45 hours Attendance</p> <p>135 hours Literature study and preparation</p>	6 credits, participation	<p>Linear regression model: least squares estimation, optimality, hypothesis testing, confidence regions;</p> <p>Generalizations and applications of the linear model: selecting regressors, GLS estimation, heteroscedasticity and autocorrelation;</p> <p>Concepts of asymptotic theory and their application to OLS estimation, tests and covariance estimation;</p> <p>Maximum likelihood estimation: basic concepts and examples, asymptotic properties, likelihood-based testing, numerical procedures;</p> <p>Instrumental variable estimation: motivation, asymptotic properties, IV based testing;</p> <p>Generalized Method of Moments: basic concepts and applications</p>
Exercise Econo- metric Methods	<p><u>2 SWS</u></p> <p><u>120 hours</u></p> <p>25 hours Attendance</p> <p>95 hours Literature study and preparation of course and special working task</p>	4 credits, participation and solving of 4 homework-exercises per term	Theoretical exercise questions; Empirical examples
Final exam	<p><u>60 hours</u></p> <p>Written exam (150 min) and preparation</p>	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <span style="margin-left: 200px;"><input type="checkbox"/> 2 semester</span>		
Start of module	<input checked="" type="checkbox"/> winter term <span style="margin-left: 200px;"><input type="checkbox"/> summer term</span>		



**Fachlicher Wahlpflichtbereich**

**Bereich A: Mikro- und Makroökonomie**

<b>Modul 100: Introduction to Advanced Microeconomic Analysis</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students know the main theories underlying the classic topics in microeconomics: competitive markets, externalities and public goods, imperfect competition, asymmetric information and bounded rationality. They can apply these theories to concrete economic problems.</p>			
<p>Preconditions: none</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Introduction to Advanced Micro- economic Analysis	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	General Equilibrium; Partial Equilibrium; Externalities; Public goods; Imperfect Competition; Monopoly; Oligopoly; Asymmetric Information; Adverse Selection; Moral Hazard; Behavioral Aspects
Exercise Introduction to Advanced Micro- economic Analysis	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises and model application
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 101: Advanced Microeconomic Theory I (PhD-level)</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students understand fundamental microeconomic concepts and tools on a very advanced level.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Microeconomics Theory I (PhD-level)	<u>4 SWS</u> <u>60 hours</u> 45 hours Attendance 15 hours Literature study and preparation	2 credits, participation	Theory of consumption and production, optimal decision under uncertainty, general equilibrium, matching, introduction to game theory
Exercise Advanced Microeconomics Theory I (PhD-level)	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises
Final exam	<u>60 hours</u> Written exam (180 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 102: Introduction to Advanced Macroeconomic Analysis</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students are able to use models of economic growth and dynamic stochastic general equilibrium for empirical and theoretical analysis of macroeconomic issues.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Introduction to Advanced Macroeconomic Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Dynamic macroeconomic analysis; empirical and theoretical questions will be analysed
Exercise Introduction to Advanced Macroeconomic Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 103: Advanced Macroeconomic Analysis I (PhD-level)</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students understand advanced methods of analyzing macroeconomic research questions, including inter-temporal optimization, stochastic processes and dynamic stochastic general equilibrium models, and are able to use these methods for evaluating the current literature and in the context of their own research.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Macroeconomic Analysis I (PhD-level)	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Foundations of advanced macroeconomic analysis; empirical and theoretical questions will be analyzed
Exercise Advanced Macroeconomic Analysis I (PhD-level)	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

**Fachlicher Wahlpflichtbereich**

**Bereich B: Volkswirtschaftslehre**

<b>Modul 104: Advanced Monetary Economics</b>			<b>Credits: 6</b>
<u>Learning objectives:</u> The students are able to use dynamic stochastic general equilibrium models for positive and normative analysis.			
Preconditions: the module "Introduction to Advanced Macroeconomic Analysis" is recommended.			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Monetary Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	The lecture develops a stochastic dynamic general equilibrium model featuring monopolistic competition and sticky prices. Compared with the exposition in the course "Monetary Economics" more emphasis will be put on the technical aspects that one needs to understand in order to use this framework. We will also analyze some recent extensions of the baseline model that is at center stage in the course "Monetary Economics".
Exercise Advanced Monetary Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	The Exercise helps understand the material of the lecture in different ways. First, some additional derivations of theoretical and empirical results are provided. Second, applications of the theory are illustrated. Third, some aspects of the practical implementation of monetary policy are discussed.
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input type="checkbox"/> winter term <input checked="" type="checkbox"/> summer term		

<b>Modul 105: Advanced International Trade: Theory and Empirics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
The students are able to analyze the patterns of international trade, both in theory and empirics. Starting with the classic Ricardian and Heckscher-Ohlin trade models, students know the frontier of research including models such as Eaton and Kortum (2002), Melitz (2003) and Melitz & Ottaviano (2008).			
Preconditions: basics in both microeconomics and macroeconomics			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced International Trade: Theory and Empirics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Ricardian trade model, Heckscher-Ohlin trade model, Eaton-Kortum trade model, Melitz-Ottaviano trade model, economic policy, economic history, economic geography
Exercise Advanced International Trade: Theory and Empirics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Discussion and empirical application of theoretical concepts from the lecture
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 106: Competition Policy</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students understand the structure of elementary models in industrial organization. They are able to discuss issues in competition policy with the help of such models and to develop simple models to address selected questions of competition policy.</p>			
<p>Preconditions: none</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Competition Policy	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Neoclassical welfare theory; normative results of static (SCP, dynamic price competition, vertical restraints) and dynamic (patent races, endogenous growth theory) industrial organization theory.
Exercise Competition Policy	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Practice of the theoretic analysis of policy question with the help of simple examples.
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 107: Decision-Making under Uncertainty</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are familiar with the most important models of economic decision-making under uncertainty. They analyze behavior under expected utility with known and unknown probabilities, under probability-weighting models and ambiguity preference.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Decision-Making under Uncertainty	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	The general model of choice under uncertainty; Expected utility; Probability weighting ; Prospect Theory; Ambiguity preferences
Exercise Decision-Making under Uncertainty	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises and applications
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term



<b>Modul 108: Empirical Labor Economics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
The students have knowledge of the economic analysis of labor markets, in particular of their applied micro-economic and empirical analysis, with a focus on the identification of causal effects. They are acquainted with topics such as labor supply and demand, human capital, education and training, changes in the wages structure and inequality, immigration, biased technological change and returns to skills, as well as organizational change and skill demand.			
Preconditions: module "Econometric Methods", recommended "Advanced Econometrics" or "Microeconometrics", knowledge in Labor Economics.			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Applied Predictive Analytics I	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	This course provides an overview on the economic analysis of labor markets. The emphasis is on applied microeconomics and empirical analyses.
Lecture Empirical Labor Economics II	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Topics to be covered include: Instrumental variable methods, differences-in-differences, regression discontinuity design, labor supply and demand, human capital/returns to skills, education and training, changes in the wages structure and inequality, biased technological change and organizational change and skill demand, the closing gender pay gap, immigration
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 109: Information Economics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students know the effect of asymmetric information in economic markets. They know the crucial role of the information structure that underlies an economic market and apply these ideas and concepts to concrete economic problems.</p>			
<p>Preconditions: module "Introduction to Advanced Microeconomic Analysis"</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Information Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Incomplete quality information (Lemons problem), Labour markets with asymmetric information (signaling, efficiency wages, equilibrium unemployment), Insurance markets with asymmetric information (screening), Credit markets with asymmetric information (rationing), Principal-Agent Problems
Exercise Information Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input type="checkbox"/> winter term <input checked="" type="checkbox"/> summer term		

<b>Modul 110: Public Economics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students know key theoretical concepts of public economics and can explain the key reasons for government intervention regarding the provision of public goods, externalities, social policy and the aims of these policies.</p> <p>They can discuss important limitations of government intervention and know key results on taxation.</p> <p>They can assess the implications of recent research regarding extensions and empirical relevance of key theoretical concepts of public economics.</p>			
<p>Preconditions: module "Introduction to Advanced Microeconomic Analysis" or equivalent and Knowledge of elementary game theory</p>			
Teaching formats	Hours per week, workload in hours	Credits and pre-conditions for granting	Topics, contents
Lecture Public Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours presence in class, 35 hours preparation and learning	2 credits, participation	Foundations of government intervention; Public goods; Externalities; Social policy; Taxation; Recent research results
Exercise Public Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours presence in class, 35 hours preparation and learning	2 credits, participation	Applied problems based on the lecture; Discussion of further literature
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of Module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 111: Advanced Labor Economics</b>		<b>Credits: 6</b>	
<p><u>Learning Objectives:</u></p> <p>Students gain a command of central theoretical frameworks for thinking about how labor markets function and how they deviate from the standard competitive paradigm. They are able to apply theory of labor economics and available empirical evidence to practical labor market contexts and understand the possibilities and limitations which can arise in the empirical verification of labor market theory using data.</p>			
<p>Preconditions: module "Introduction to Advanced Microeconomic Analysis" or "Advanced Microeconomics Theory I (PhD-level)" and module "Introduction to Advanced Macroeconomics Analysis" or "Advanced Macroeconomic Analysis I (PhD-level)"</p>			
Teaching format	Hours per week, work-load in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Labor Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Theoretical models of labor markets, their applications and empirical implementation; survey of literature
Exercise Advanced Labor Economics	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Review of models and exercises
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input type="checkbox"/> winter term <input checked="" type="checkbox"/> summer term		

**Fachlicher Wahlpflichtbereich**

**Bereich C: Volkswirtschaftslehre und Methodische Grundlagen**

**Volkswirtschaftslehre**

<b>Modul 121: Advanced Macroeconomic Analysis II (PhD-level)</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
The students are able to build on their knowledge of intertemporal optimization, stochastic processes and dynamic stochastic general equilibrium models to study advanced topics in monetary macroeconomics and finance, business cycle theory, and models with market imperfections. They learn more advanced methods of model solution, estimation and simulation.			
Preconditions: module "Advanced Macroeconomic Analysis I (PhD-level)"			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Macro-economic Analysis II (PhD-level)	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Topics include asset pricing, advanced preference theory, dynamic contracts and applications, growth models, OLG models; money and models of price and wage rigidities; economic policy and time consistency, applied VAR analysis, models of labor markets with frictions. More advanced tools of model solution are discussed and developed.
Exercise Advanced Macro-economic Analysis II (PhD-level)	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	In-depth review, literature review and exercises
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester.		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 122: Topics in Macroeconomics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to address selected topics in macroeconomics using state-of-the-art quantitative methods.          Students choose either a lecture and exercise (with written exam) or seminar I and seminar II (with term paper).</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Lectures on current issues in macroeconomics
Exercise	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Seminar I	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Seminar on current issues in macroeconomics
Seminar II	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	<u>60 hours</u> Written exam (90 min) and preparation or term paper (45,000 ZoL) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term or <input checked="" type="checkbox"/> summer term		

<b>Modul 123: Topics in Labor Economics and Macroeconomics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to address selected topics in labor macroeconomics and/or macroeconomics using state-of-the-art quantitative methods.          Students choose either a lecture and exercise (with written exam) or seminar I and seminar II (with term paper).</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Lectures on current issues in labor and macroeconomics
Exercise	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Seminar I	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Seminar on current issues in labor and macroeconomics
Seminar II	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	<u>60 hours</u> Written exam (90 min) and preparation or term paper (45,000 ZoL) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <span style="margin-left: 200px;"><input type="checkbox"/> 2 semester</span>		
Start of module	<input checked="" type="checkbox"/> winter term <span style="margin-left: 50px;">or</span> <span style="margin-left: 50px;"><input checked="" type="checkbox"/> summer term</span>		

<b>Modul 130: European Economic History I</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
<p>The students know the field of Economic History, in particular for the period 1800-1914. Students understand the long-term perspective and the role of historical case studies for economic decision making. They gain new insights into long-term development and are able to apply their knowledge of economic theory and empirical methods. Students have an impression of the economic history of the world, in particular of Europe and Germany and know a variety of modern research in economic history. Students are able to devise own research questions and research designs for their master's thesis.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture European Economic History I	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	European Economic History 1800 - 1914
Exercise European Economic History I	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercise sessions
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		



<b>Modul 131: European Economic History II</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
<p>The students know the field of Economic History, in particular for the period 1914 - today. Students understand the long-term perspective and the role of historical case studies for economic decision making. They gain new insights into long-term development and are able to apply their knowledge of economic theory and empirical methods. Students have an impression of the economic history of the world, in particular of Europe and Germany and know a variety of modern research in economic history. Students are able to devise own research questions and research designs for their master's thesis.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture European Economic History II	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	European Economic History 1914 - up to now
Exercise European Economic History II	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercise sessions
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 132: Economic History</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students have a long-term perspective and are able to understand the role of historical case studies for economic decision making. They gain new insights into long-run development and are able to apply their knowledge of economic theory and empirical methods. Students have an impression of particular aspects of economic history within the context of global, European and German developments. The students know modern research in economic history and are able to devise own research questions and research designs for their master's thesis.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Economic History I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, Participation	The seminars cover key topics in European economic history, ranging from methods of modern research in economic history, over economic crises to long-run economic developments, and specific historical case-studies. The focus of the first part is on theoretical concepts.
Seminar Economic History II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, Participation  Presentation (30 min)	The focus of the first part is on empirical applications of the theoretical concepts from part 1.
Final exam	<u>90 hours</u> Term paper (40,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 133: Spatial Economics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students know a variety of the vast literature on Spatial Economics. They are familiar with ideas developed by Von Thünen and Krugman leading to modern theories on the interaction between economics and geography. Students know models and empirics for topics such as international specialization, the clustering of industries, the spatial pattern of economic growth, and the relationship between core and periphery within economic regions.</p>			
<p>Preconditions: module "Introduction to Advanced Microeconomic Analysis" or "Advanced Microeconomics Theory I (PhD-level)" and module "Introduction to Advanced Macroeconomics Analysis" or "Advanced Macroeconomic Analysis I (PhD-level)"</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Spatial Economics I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Core and periphery, increasing returns to scale, transport costs, Law of one price, clustering, specialization, theoretical concepts
Seminar Spatial Economics II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, Participation  Presentation (30 min)	Core and periphery, increasing returns to scale, transport costs, law of one price, clustering, specialization, empirical applications
Final exam	<u>90 hours</u> Term paper (40,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 134: From Paul A. Samuelson to Elinor Ostrom - History of Economic Thought in the 20th Century</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students should learn to analyse, to understand and to interpret historical events and developments in the history of economic thought. They should learn to analyse publications on economics. The exceptional role of mathematics, the close connections between economic theories and mathematical methods and the limits of mathematics will be studied too. The aim of the seminar is to study classical papers on economics and to analyse them from a historical perspective.</p> <p>Active participation is desired; the seminar is for students who are interested in history of economics and mathematical economics.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar I	<u>1 SWS</u> 30 hours 15 hours attendance 15 hours literature study and preparation	1 credit, participation	Serious reading of classical papers (book chapters or articles) on economics, written by economists and mathematicians, who were awarded with the Nobel Prize in Economics, i. e. the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel; study of economic theories by investigating significant publications of some of the 76 Laureates between 1969 and 2015. The development of mathematical and statistical methods which became important tools, will be studied.
Seminar II	<u>1 SWS</u> 60 hours 15 hours attendance 45 hours literature study and preparation of course and special working task	2 credits, participation presentation (30 min)	Serious reading on the background of the history of economics in general; on the history of the Nobel Foundation, its Prizes, and the establishment of the Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel. Reading on contributions to economic thought, by developing either economic theories or special methods for a better understanding of micro- and macroeconomics, or using mathematical methods and tools.
Final exam	<u>90 hours</u> Term paper (45.000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 140: Selected Topics in Industrial Organization</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students understand the fundamental argument as well as the advanced scientific literature of one research topic in industrial organization. They are able to apply these arguments to raise and answer a simple question concerning the selected topic.</p>			
<p>Preconditions: module „ Introduction to Advanced Microeconomics Analysis“</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Selected Topics in Competition Policy	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation of course and special working task	1 credit, participation, written test (45 min)	The fundamental arguments of the selected topic are introduced. A written exam (pass/fail) has to be taken in order to continue with the seminar.
Seminar Selected Topics in Competition Policy	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation of course and special working task	2 credits, Participation, presentation (30 min)	discussion of selected papers, guided search for a feasible extension of the scientific literature.
Final exam	<u>90 hours</u> Term paper (30,000-45,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 150: Advanced Microeconomics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students are familiar with the leading theoretical models in a sub-field of microeconomics and can apply the tools to a specific economic context.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Depends on seminar topic
Seminar II	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Depends on seminar topic
Final exam	<u>120 hours</u> Term paper (30,000 ZoL) and preparation	4 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 151: Behavioral Economics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students are familiar with the most important models of behavioral economics, including recent developments in the literature.			
Preconditions: module „ Introduction to Advanced Microeconomics Analysis“			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Behavioral Economics I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Decision under uncertainty, market power, strategic interaction, game theory
Seminar Behavioral Economics II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, participation presentation (25 min)	Asymmetric information, incentives, mechanism design, contract theory
Final exam	<u>90 hours</u> Term paper (30,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 152: Empirical Methods in Applied Microeconomics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students are familiar with the most important empirical methods in applied microeconomics, including recent developments in the literature.			
Preconditions: module „Introduction to Advanced Microeconomics Analysis“			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Empirical Methods in Applied Microeconomics I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Microeconometrics; Applied Microeconomics;
Seminar Empirical Methods in Applied Microeconomics II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, participation presentation (25 min)	Public Policy
Final exam	<u>90 hours</u> Term paper (30,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		



<b>Modul 153: Advanced Experimental Economics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are familiar with the most important methods and results in experimental economics, including recent developments in the literature.</p>			
<p>Preconditions: module „Introduction to Advanced Microeconomics Analysis“</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Advanced Experimental Economics I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Economic experiments, social preferences, non-equilibrium beliefs, quantal response equilibrium, econometric estimation
Seminar Advanced Experimental Economics II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, participation presentation (25 min)	Exercises
Final exam	<u>90 hours</u> Term paper (30,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 154: Trust and Reputation</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are familiar with the most important microeconomic analyses of trust and reputation, including recent developments in the literature.</p>			
<p>Preconditions: module "Introduction to Advanced Microeconomic Analysis" or "Game Theory" [or equivalent].</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Trust and Reputation I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theories of economic behavior under asymmetric information with a focus on the roles of and mechanisms behind trust and reputation. Empirical applications thereof.
Seminar Trust and Reputation II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, participation presentation (25 min)	Exercise
Final exam	<u>90 hours</u> Term paper (30,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 155: Advanced Microeconomic Theory II (PhD-level)</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students understand fundamental microeconomic concepts and tools on a very advanced level.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Microeconomic Analysis II (PhD-level) I	<u>4 SWS</u> <u>60 hours</u> 45 hours Attendance 15 hours Literature study and preparation	2 credits, participation	Decision under uncertainty, market power, strategic interaction, game theory, asymmetric information, incentives, mechanism design, contract theory.
Lecture Advanced Microeconomic Analysis II (PhD-level) II	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 160: Theory of Incentives</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students know the main topics and models of the incentive theory and asymmetric information. They know the principal-agent and the effects of moral hazard, adverse selection and signaling. Furthermore they can apply these theories and concept to concrete economic problems.			
Preconditions: module "Introduction to Advanced Microeconomic Analysis"			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Theory of Incentives	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Adverse Selection, Revelation Principle, Solution Techniques, Ex-Post vs. Ex-Ante Contracting, Limited Liability, Moral Hazard, First-Order-Approach, Mixed Models of Adverse Selection and Moral Hazard, Dynamic Aspects in Incentive Theory
Exercise Theory of Incentives	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises and model application
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 161: Game Theory</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students know the main concepts of strategic thinking and behavior. They know the various solution concepts of game theory. They can apply these concepts to concrete economic problems.			
Preconditions: module "Introduction to Advanced Microeconomics Analysis"			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Game Theory	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Normal-form games, extensive-form games, games with incomplete information, standard solution concepts and refinements
Exercise Game Theory	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input type="checkbox"/> winter term <input checked="" type="checkbox"/> summer term		

<b>Modul 162: Topics in Microeconomics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to address selected topics in microeconomics using state-of-the-art quantitative methods. The students study applications of microeconomic techniques and analyze microeconomic problems in different fields of economics.</p> <p>Students choose either a lecture and exercise (with written exam) or seminar I and seminar II (with term paper).</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Lectures on current issues in microeconomics
Exercise	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Seminar I	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Seminar on current issues in microeconomics
Seminar II	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	60 hours Written exam (90 min) and preparation or term paper (45,000 ZoL) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term or		<input checked="" type="checkbox"/> summer term

<b>Modul 170: Social Preferences</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students know key experimental evidence on social preferences and can apply the most important models of social preferences to explain key experimental results and know their limitations. They can contribute to the debate about the relevance of laboratory experiments on social preference and are able to explain the relevance of social preferences for economic theory and have an understanding how economic models can be extended to incorporate social preferences.</p>			
<p>Preconditions: module "Introduction to Advanced Microeconomic Analysis" or equivalent;          Knowledge of elementary game theory;          knowledge of statistical analysis will make it easier to follow the data analysis in the experimental papers and thus enable a more critical view, but is not strictly necessary</p>			
Teaching formats	Hours per week, workload in hours	Credits and pre-conditions for granting	Topics, contents
Lecture Social Preferences – Theories and Evidence	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Experimental evidence of social preference; Models of social preferences and their applications; Testing models of social preferences; Multiplicity of fairness norms and heterogeneity of social preferences; Relevance and generalizability of laboratory experiments on social preferences ; Applications to economic theory
Exercise Social Preferences – Theories and Evidence	<u>2 SWS</u>  <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Discussions of further literature, examples, and applications of the topics from the lecture
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of Module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 171: Seminar in Public Economics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
The students know key theoretical and empirical results on a current topic in public economics. They are able to represent topics, methods, and results of the respective research area in public economics.			
Preconditions: module "Introduction to Advanced Microeconomic Analysis" [or equivalent].			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Voting Behavior I	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theoretical results on a recent topic in public economics.
Seminar Voting Behavior II	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, participation, presentation (45 min)	Empirical results on a recent topic in public economics.
Final exam	<u>90 hours</u> Term paper (40,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term



<b>Modul 172: Topics in Public Economics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to address selected topics in public economics using state-of-the-art quantitative methods.                  Students choose either a lecture and exercise (with written exam) or seminar I and seminar II (with term paper).</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<u>2 SWS</u>  60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Lectures on current issues in Public Economics
Exercise	<u>2 SWS</u>  60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Seminar I	<u>2 SWS</u>  60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Seminar on current issues in public economics
Seminar II	<u>2 SWS</u>  60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	60 hours Written exam (90 min) and preparation or term paper (45,000 ZoL) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <span style="margin-left: 200px;"><input type="checkbox"/> 2 semester</span>		
Start of module	<input checked="" type="checkbox"/> winter term or <span style="margin-left: 100px;"><input checked="" type="checkbox"/> summer term</span>		

<b>Modul 180: Economic Growth</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to understand and apply exogenous and endogenous economic growth models for further research analysis.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Economic Growth	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	The lecture covers the first attempts of growth models, advanced exogenous models and introduces different types of endogenous models.
Exercise Economic Growth	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	The problem sets are additional mathematical examples to give students a better understanding of the lecture.
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 190: Emerging Markets</b>		Credits: 6	
<p><u>Learning objectives:</u></p> <p>The students are able to characterize the specific role of emerging economies in the world economy. They know about stylized processes of (financial) development, about mechanisms of financial crises, the foundation and policy issues of microfinance and the impact of individual characteristics on behavior.</p>			
<p>Preconditions: basic knowledge in monetary, financial and international economics</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<p><u>2 SWS</u></p> <p><u>60 hours</u>                      25 hours Attendance                      35 hours Literature study and preparation of course and special working task</p>	<p>2 credits, participation</p> <p>assignment (about 20,000 characters)</p>	<p>Principles of emerging economies                      Financial sector development                      Financial crisis                      Microfinance                      Risk attitude and financial literacy</p>
Seminar	<p><u>2 SWS</u></p> <p><u>90 hours</u>                      25 hours Attendance                      65 hours Literature study and preparation of course and special working task</p>	<p>3 credits, participation</p> <p>term paper (30,000 ZoL) and preparation</p>	<p>Selected topics of emerging markets</p>
Final exam	<p><u>30 hours</u>                      Multimedia exam (30 min) and preparation</p>	<p>1 credit, pass</p>	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 201: Selected Topics in Economics</b>			<b>Credits: 6</b>
<p><u>Learning objectives:</u></p> <p>The students are able to address selected topics in Economics.</p> <p>Students choose either a lecture and exercise (with written exam) or a seminar (with term paper).</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Current issues in economics
Exercise	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Seminar	<u>2 SWS</u> <u>90 hours</u> 25 hours Attendance 65 hours Literature study and preparation of course and special working task	3 credits, participation, presentation (30 -60 min) and discussion	Current issues in economics
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
	<u>90 hours</u> Term paper (45,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term or <input checked="" type="checkbox"/> summer term		

**Fachlicher Wahlpflichtbereich**

**Bereich C: Volkswirtschaftslehre und Methodische Grundlagen**

**Methodische Grundlagen**

<b>Modul 8.1: Applied Econometrics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students have a basic knowledge of econometric models and methods for analyzing cross-sectional data, panel data and time series data as well as of their applicability in practice. They are able to carry out own empirical studies to investigate particular economic problems, whereby they apply appropriately chosen econometric methods and interpret the results in a meaningful way.			
Preconditions: basic knowledge equivalent to module "Introduction to Econometrics" (Bachelor)			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Applied Econometrics	<u>3 SWS</u> <u>90 hours</u> 35 hours Attendance 55 hours Literature study and preparation	3 credits, participation	Extensions and applications of the linear regression model; Model selection and model diagnostics; Stochastic regressors and instrumental variable estimation; Introduction to panel data analysis; Models for qualitative and limited dependent variables (logit and probit models, truncated and censored data, tobit model); Time series analysis (specification, estimation and forecasting in (V)AR-models)
Exercise Applied Econometrics	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theoretical exercise questions; Application of methods to empirical data; Use of econometric software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semesters		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 80: Time Series Analysis</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
<p>The students have a sound knowledge of the econometric time series methodology including its probabilistic/statistical concepts, with a focus on univariate modeling tools. They know how to appropriately specify, estimate and validate an ARIMA model in order to forecast future values of the time series, and are able to carry out own empirical studies and to interpret the results in a meaningful way. The students are also familiar with the main concepts of multivariate time series analysis and of modeling conditional heteroscedasticity.</p>			
Preconditions: basic knowledge equivalent to module "Introduction to Econometrics" (Bachelor)			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Time Series Analysis	<u>3 SWS</u> <u>90 hours</u> 35 hours Attendance 55 hours Literature study and preparation	3 credits, participation	Exploratory time series analysis based on components models (linear filtering, trend estimation, seasonal adjustment); Stochastic processes and stationarity; Specification, estimation, validation and forecasting of AR(1)MA models; Nonstationary processes and unit root testing; GARCH models for clustered volatility; Stable VAR processes; Causality and impulse-response analysis; Cointegration analysis
Exercise Time Series Analysis	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theoretical exercise questions; Application of time series methods to empirical data; Use of econometric software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 81: Analysis of Panel Data</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students have a thorough knowledge of the basic concepts and methods for analyzing panel data. Confronted with an economic research question, they are able to specify appropriately a model, to carry out an own empirical study and to interpret the results in a meaningful way.</p>			
<p>Preconditions: basic knowledge equivalent to module "Introduction to Econometrics" (Bachelor)</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Analysis of Panel Data	<u>3 SWS</u> <u>90 hours</u> 35 hours Attendance 55 hours Literature study and preparation	3 credits, participation	Basic concepts; Error component regression models with fixed and random effects; Tests of hypotheses with panel data; Serial correlation and heteroscedasticity; Simultaneous equations with error components; Dynamic panel data models; Models for qualitative dependent variables
Exercise Analysis of Panel Data	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theoretical exercise questions; Application of methods to empirical data; Use of econometric software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 82: Microeconometrics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students have a good understanding of microeconomic methods for analyzing cross-sectional, individual-level data. They have a sound knowledge of models of discrete choice, censoring, truncation, sample selection, treatment effects, duration, and the analysis of count data. The students are able to carry out own empirical studies to investigate the economic behavior of individuals or firms, and to interpret the results in a meaningful way.</p>			
<p>Preconditions: basic knowledge equivalent to module "Introduction to Econometrics" (Bachelor)</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Microeconometrics	<u>3 SWS</u> <u>90 hours</u> 35 hours Attendance 55 hours Literature study and preparation	3 credits, participation	Binary, multinomial and ordered response models: identification, interpretation and estimation of parameters, model diagnostics; Tobit model: truncated and censored regression; Sample selection models and evaluation of treatment effects; Models for duration data: hazard functions, estimation with censored data, heterogeneity; Count data analysis: Poisson and negative binomial regression model
Exercise Microeconometrics	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theoretical exercise questions; Application of methods to empirical data; Use of econometric software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term



<b>Modul 83: Advanced Econometrics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students have a rigorous knowledge of regressions methods and maximum likelihood estimation both for cross-sectional and panel applications with a focus on causal analysis in microeconometrics. They are familiar with asymptotic analysis with a focus on robust standard errors and LM-tests under heteroscedastic settings. They learn advanced estimation techniques in modern econometrics such as generalized methods of moments (GMM), binary response models, limited dependent variables models, selection models, and selected semiparametric methods.</p>			
<p>Preconditions: module „Econometric Methods“</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Advanced Econometrics	<u>3 SWS</u> <u>90 hours</u> 35 hours Attendance 55 hours Literature study and preparation	3 credits, participation	single-equation regression (OLS and 2SLS), Wald estimator and LATE, system estimation, panel regression, robust standard errors, LM-Tests, maximum likelihood, binary response models, limited dependent variables models, selection models, selected semiparametric methods such as non-parametric regression, partially linear models, or quantile regression
Exercise Advanced Econometrics	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Theoretical exercise questions; Application of methods to empirical data; Use of econometric software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 84: Estimation of Treatment Effects</b>		<b>Credits: 6</b>	
<u>Learning Goals:</u> Students will have a formal understanding of nonparametric and semiparametric regression techniques and of modern microeconomic methods for treatment effects estimation. The treatment focuses on the potential outcome approach, and students learn various methods to account for selection based on observables and for selection based on unobservables. These methods are used for cross-section data and longitudinal data, both repeated cross-sections and panel data. Students will familiarize themselves with applying the methods using Stata.			
Preconditions: module „Econometric Methods “			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Estimation of Treatment Effects	<u>3 SWS</u> <u>90 hours</u> 35 hours Attendance 55 hours Literature study and preparation	3 credits, participation	Kernel Estimation, Nearest Neighbor estimation, Nonparametric Regression, Semiparametric selection model; Potential Outcome Approach; Methods to account for selection on observables (regression, matching, inverse probability weighting); Methods to account for selection on unobservables (Heckman selection correction, difference-in-differences, panel regression, instrumental variable regression, regression discontinuity design)
Exercise Estimation of Treatment Effects	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Work on Exercise Problems; Application of methods using real empirical data; Use of econometric software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 Semester <input type="checkbox"/> 2 Semester		
Start of module	<input checked="" type="checkbox"/> WS <input type="checkbox"/> SoSe		

<b>Modul 85: Econometric Projects</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to conduct methodologically solid empirical research. They have a good understanding of how to apply appropriately chosen econometric methods to real data or to simulated data. They are familiar with empirical data-handling and with the way of translating an economic model into an econometric model that can be estimated. The students have the ability to present their research findings orally as well as in written form.</p>			
<p>Preconditions: module „Econometric Methods“ and one other course in econometrics</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Econometric Projects	<u>1 SWS</u> <u>30 hours</u> 15 hours Attendance 15 hours Literature study and preparation	1 credit, participation	Introduction of econometric problems, models and software
Seminar Econometric Projects	<u>1 SWS</u> <u>60 hours</u> 15 hours Attendance 45 hours Literature study and preparation of course and special working task	2 credits, participation, oral presentation (max. 30 min)	Presentation and discussion of empirical student projects or simulation studies
Final exam	<u>90 hours</u> Term paper (about 15 pages/ 27,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term	or	<input checked="" type="checkbox"/> summer term

<b>Modul 86: Selected Topics in Econometrics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students have a deep understanding of advanced methods in certain special fields of econometrics, and know how to apply these methods to empirical data. They are able to understand and evaluate current research in the field of theoretical and applied econometrics.</p>			
<p>Preconditions: module „Econometric Methods“</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
This module consists of a combination of: Lecture/ Exercise/ Seminar	<u>4 SWS</u> <u>120 hours</u> 45 hours Attendance 75 hours Literature study and preparation of course and special working task	4 credits, participation and, if seminar, special work assignment: oral presentation (max. 30 min)	Advanced methods in special fields of econometrics such as non- and semi-parametric techniques, resampling methods, Bayesian inference, multiple time series analysis, econometric forecasting, financial econometrics; Use of econometric software and application of econometric methods
Final exam	<u>60 hours</u> Seminar: Term paper (ca. 10 pp./ 18.000 characters) and preparation – 1 credit  Lecture: Written exam (90 min if 4 periods/week or 60 min if 2 periods/week) or oral exam (30 min) and preparation – 1 credit	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester	or	<input checked="" type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term	and/or	<input checked="" type="checkbox"/> summer term

<b>Modul 9: Multivariate Statistical Analysis</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u>			
The students have overview about theoretical foundations of multivariate statistics. They are able to use basic multivariate techniques.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Multivariate Statistical Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Graphical display of multidimensional data, Repetition: matrix algebra, linear model, correlation, Multivariate random variables, Multinormal distribution, Maximum likelihood theory, Principal components, Discriminant Analysis, Cluster Analysis
Exercise Multivariate Statistical Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Practical work with statistical software
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semesters		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 90: Statistical Programming Languages</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students are introduced to the basic concepts of statistical programming languages as R or Matlab and its application. They have in-depth knowledge of mathematical and algorithmic foundations of statistical software.			
Preconditions: basic knowledge equivalent to module „Statistik I“ und “Statistik II” (Bachelor)			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Statistical Programming Languages I	<u>1 SWS</u> <u>30 hours</u> 15 hours attendance 15 hours literature study and preparation	1 credit, participation	Data analysis and programming statistical algorithms in a statistical programming language
Seminar Statistical Programming Languages II	<u>1 SWS</u> <u>60 hours</u> 15 hours attendance 45 hours literature study and preparation of course and special working task	2 credits, participation presentation (45 min)	Application in programming, e.g. in Numerical Linear Algebra, Curve Fitting, Optimization, Random Number Generation, Numerical Solutions of Stochastic Differential Equations
Final exam	<u>90 hours</u> Term paper (45.000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Module 91: Datenanalyse I</b>		<b>Leistungspunkte: 6</b>	
<p><u>Lern- und Qualifikationsziele:</u></p> <p>Die Studierenden haben eine Übersicht über Methoden zur Aufbereitung und Analyse von Beobachtungsdaten mittels deskriptiver, explorativer, grafischer und induktiver statistischer Verfahren unter Einsatz von statistischer Software. Sie sind in der Lage, komplexe Statistik-Prozeduren theoretisch fundiert anzuwenden und die Ergebnisse sachgerecht zu interpretieren. Die Veranstaltungen decken dabei die Datenaufbereitung, univariate Statistik und (Unter-)Gruppenanalyse ab.</p>			
<p>Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: keine</p>			
Lehrveranstaltungsart	Präsenzzeit Workload in Stunden	Leistungspunkte, Voraussetzung für deren Ertei- lung	Themen, Inhalte
Vorlesung Datenanalyse I	<u>2 SWS</u>  60 Stunden 25 Stunden Präsenzzeit 35 Stunden Vor- und Nachbereitung der Lehrveranstaltungen	2 LP, Teilnahme	Wiederholung Statistik I und II, Fragebogenkonstruktion, Datenbereinigung, Ausreißer, Fehlende Werte, Univariate und Bivariate Statistik (Grafiken, Kennzahlen und Tests)
Übung Datenanalyse I	<u>2 SWS</u>  60 Stunden 25 Stunden Präsenzzeit 35 Stunden Vor- und Nachbereitung der Lehrveranstaltungen	2 LP, Teilnahme	Praktische Aufgaben zum Vorlesungs- stoff, die mit statistischer Software gelöst werden
Modulabschlussprüfung	60 Stunden Klausur (90 min) oder mündliche Prüfung (30 min) und Vorbereitung	2 LP, Bestehen	
Dauer des Moduls	<input checked="" type="checkbox"/> 1 Semester <input type="checkbox"/> 2 Semester		
Beginn des Moduls	<input type="checkbox"/> Wintersemester <input checked="" type="checkbox"/> Sommersemester		

<b>Modul 92: Datenanalyse II</b>		<b>Leistungspunkte: 6</b>	
<p><u>Lern- und Qualifikationsziele:</u></p> <p>Die Studierenden haben eine Übersicht über Methoden zur Aufbereitung und Analyse von Beobachtungsdaten mittels deskriptiver, explorativer, grafischer und induktiver statistischer Verfahren unter Einsatz von statistischer Software. Sie sind in der Lage, komplexe Statistik-Prozeduren theoretisch fundiert anzuwenden und die Ergebnisse sachgerecht zu interpretieren. Die Veranstaltungen decken dabei die Zusammenhänge- und Regressionsanalyse sowie die Multivariate Statistik ab.</p>			
<p>Fachliche Voraussetzungen für die Teilnahme am Modul bzw. bestimmten Lehrveranstaltungen des Moduls: keine</p>			
Lehrveranstaltungsart	Präsenzzeit Workload in Stunden	Leistungspunkte, Voraussetzung für deren Ertei- lung	Themen, Inhalte
Vorlesung Datenanalyse II	<u>2 SWS</u> <u>60 Stunden</u> 25 Stunden Präsenzzeit 35 Stunden Vor- und Nachbereitung der Lehrveranstaltungen	2 LP, Teilnahme	Multivariate Statistik, Lineare Regression, Nicht- und semiparametrische Re- gression
Übung Datenanalyse II	<u>2 SWS</u> <u>60 Stunden</u> 25 Stunden Präsenzzeit 35 Stunden Vor- und Nachbereitung der Lehrveranstaltungen	2 LP, Teilnahme	Praktische Aufgaben zum Vorle- sungsstoff, die mit statistischer Software gelöst werden
Modulabschlussprüfung	<u>60 Stunden</u> Klausur (90 min) oder mündliche Prüfung (30 min) und Vorbereitung	2 LP, Bestehen	
Dauer des Moduls	<input checked="" type="checkbox"/> 1 Semester <input type="checkbox"/> 2 Semester		
Beginn des Moduls	<input checked="" type="checkbox"/> Wintersemester <input type="checkbox"/> Sommersemester		



<b>Modul 93: Statistics of Financial Markets</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students know the basic concepts of option pricing and its probabilistic foundations and stochastic processes in discrete time. They have an overview about various methods, e.g. Black-Scholes Option model and numerical solutions.</p>			
<p>Preconditions: none</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Statistics of Financial Markets I	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Financial derivative, Option management, Basic concepts of probability theory, Stochastic processes in discrete time, Stochastic Integrals and differential equations, Black-Scholes option pricing model, Binomial model for European options and American options, Exotic options and interest rate derivatives. As a part of the course, an obligatory trip to an European financial institution will be organized.
Exercise Statistics of Financial Markets I	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Practical applications
Final exam	<u>60 hours</u> Oral exam (30 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 94: Advanced Methods in Quantitative Finance</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students have detailed knowledge of financial time series analysis. They know various techniques and applications for risk analysis.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Statistics of Financial Markets II	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Basic concepts of statistical models, ARIMA model, Time series of stochastic Volatility, Nonparametric model on financial time series, Value at risk and back testing, Copulas, Extreme value, Neuronal network
Lecture Advanced Methods in Quantitative Finance	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Value at Risk, Credit Risk, Implied Volatility, mathematical and computational aspects of risk managements in banks
Final exam	<u>60 hours</u> Oral exam (60 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 95: Selected Topics in Finance, Insurance and Mathematical Statistics</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students have an overview about statistical tools applied in finance and insurance. They have an in-depth knowledge about the mathematical foundations of these tools.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Statistical Tools for Finance and Insurance	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Modern statistical tools applied in finance and insurance
Lecture Mathematical Foundations for Finance and Insurance	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Mathematical foundations for statistical tools in finance and insurance
Final exam	<u>60 hours</u> Oral exam (60 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

<b>Modul 96: Multivariate Statistics and Non- and Semiparametric Modeling</b>			<b>Credits: 6</b>
<u>Learning objectives:</u> The students have in-depth knowledge of selected statistical topics.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Multivariate Statistical Analysis II	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Decomposition of data matrices by factors, Factor analysis, Multidimensional scaling, Canonical correlations, Correspondence analysis, Projection pursuit, Conjoint measurement analysis, SIR
Lecture Non- and Semiparametric Modeling	<u>2 SWS</u> <u>60 hours</u> 25hours Attendance 35 hours Literature study and preparation	2 credits, participation	Histogram, Nonparametric Density Estimation, Nonparametric Regression, Additive Models, Linear Models, Generalized Linear Models, Additive Models, Single-Index Models, Generalized Partial Linear Models, Generalized Additive Models
Final exam	<u>60 hours</u> Written exam (180 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 97: Statistical Seminars</b>		<b>Credits: 6</b>	
<u>Learning objectives:</u> The students have in-depth knowledge of current research in financial and related mathematical statistics.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Mathe- matical Statistics	<u>2 SWS</u>  60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Presentation of research results in top- ics in mathematical statistics
Seminar Economic Risk	<u>2 SWS</u>  60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Selected Topics of Economic Risk
Final exam	<u>60 hours</u> Oral exam (45 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Start of module	<input checked="" type="checkbox"/> winter term		<input checked="" type="checkbox"/> summer term

<b>Modul 98: Selected Topics in History of Statistics</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students should learn to be able to analyse, to understand and to interpret historical events and developments in the history of statistics. They should learn methodological approaches to analyse publications on statistics and mathematics. The aim of the seminar is to study classical papers on statistics and mathematical statistics and to analyse them from a historical perspective.</p> <p>Active participation is desired; the seminar is for students who are interested in history of statistics and mathematical statistics.</p>			
<p>Preconditions: module „Statistik I“ and „Statistik II“ or equivalent knowledge</p>			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Selected Topics in History of Statistics I	<p><u>1 SWS</u></p> <p><u>30 hours</u> 15 hours attendance 15 hours literature study and preparation</p>	1 credit, participation	<p>Serious reading of classical papers (book chapters or articles) on mathematics and mathematical statistics (for example written by Leontief, Kantorovich, Koopmans, Dantzig)</p> <p>Reading on history of ideas, theories, and methods, and biographies related to the topic</p> <p>Reading on history of computer technology, and computer programming, related to statistics</p>
Seminar Selected Topics in History of Statistics II	<p><u>1 SWS</u></p> <p><u>60 hours</u> 15 hours attendance 45 hours literature study and preparation of course and special working task</p>	2 credits, participation presentation (30 min)	<p>Serious reading of classical papers on statistics (for example written by von Bortkiewicz, von Mises, and others)</p> <p>Reading on history of ideas, theories, and methods, and biographies related to the topic</p> <p>Comparative analysis of the development of statistics in different countries and various time periods</p>
Final exam	<p><u>90 hours</u> Term paper (45.000 ZoL) and preparation</p>	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input type="checkbox"/> winter term <input checked="" type="checkbox"/> summer term		

<b>Modul 99: Privatissimum</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students have knowledge of selected mathematical topics important for statistics and their historical development. They should acquire methodological knowledge for the historical analysis of statistical and mathematical publications.</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Seminar Privatissimum I	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Review and discussion of statistical research results
Seminar Privatissimum II	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation of course and special working task	2 credits, participation, presentation (30 min)	Presentation of research results at the Ladislaus von Bortkiewicz Chair of Statistics
Final exam	<u>60 hours</u> Oral exam (45 min) and preparation	2 credits, pass	
Dauer des Moduls	<input checked="" type="checkbox"/> 1 semester		<input type="checkbox"/> 2 semester
Beginn des Moduls	<input checked="" type="checkbox"/> winter term		<input type="checkbox"/> summer term

<b>Modul 202: Selected Topics in Quantitative Methods</b>		<b>Credits: 6</b>	
<p><u>Learning objectives:</u></p> <p>The students are able to address selected topics in Quantitative Methods.</p> <p>Students choose either a lecture and exercise (with written exam) or a seminar (with term paper).</p>			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Current issues in Quantitative Methods
Exercise	<u>2 SWS</u> 60 hours 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Seminar	<u>2 SWS</u> 90 hours 25 hours Attendance 65 hours Literature study and preparation of course and special working task	3 credits, participation, presentation (30 - 60 min) and discussion	Current issues in Quantitative Methods
Final exam	<u>60 hours</u> Written exam (90 min) and preparation	2 credits, pass	
	<u>90 hours</u> Term paper (45,000 ZoL) and preparation	3 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term or <input checked="" type="checkbox"/> summer term		



**Überfachlicher Wahlpflichtbereich für andere Masterstudiengänge:**

<b>ÜWP MA-VWL 1: Introduction to Advanced Microeconomic and Macroeconomic Analysis</b>			<b>Credits: 10</b>
<u>Learning objectives:</u>			
The students know the main theories underlying the classic topics in microeconomics: competitive markets, externalities and public goods, imperfect competition, asymmetric information and bounded rationality. They can apply these theories to concrete economic problems. The students are able to use models of economic growth and dynamic stochastic general equilibrium for empirical and theoretical analysis of macroeconomic issues.			
Preconditions: none			
Teaching format	Hours per week, workload in hours	Credits preconditions for granting	Topics, contents
Lecture Introduction to Advanced Microeconomic Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	General Equilibrium; Partial Equilibrium; Externalities; Public goods; Imperfect Competition; Monopoly; Oligopoly; Asymmetric Information; Adverse Selection; Moral Hazard; Behavioral Aspects
Exercise Introduction to Advanced Microeconomic Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Exercises and model application
Lecture Introduction to Advanced Macroeconomic Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Dynamic macroeconomic analysis; empirical and theoretical questions will be analysed
Exercise Introduction to Advanced Macroeconomic Analysis	<u>2 SWS</u> <u>60 hours</u> 25 hours Attendance 35 hours Literature study and preparation	2 credits, participation	Literature review, discussions, applications
Final exam	<u>60 hour</u> Written exam Introduction to Advanced Microeconomics Analysis (90 min) and preparation or Written exam Introduction to Advanced Macroeconomic Analysis (90 min) and preparation	2 credits, pass	
Duration	<input checked="" type="checkbox"/> 1 semester <input type="checkbox"/> 2 semester		
Start of module	<input checked="" type="checkbox"/> winter term <input type="checkbox"/> summer term		

**Anlage 2: Idealtypischer Studienverlaufsplan<sup>1</sup>**

Nr. d. Moduls	Name oder Kürzel des Moduls	1. Semester	2. Semester	3. Semester	4. Semester
8.2	<b>Pflichtmodul</b> Econometric Methods	12 LP			
100	<b>Wahlpflichtmodule Mikro- und Makroökonomie</b> Introduction to Advanced Microeconomic Analysis oder Advanced Microeconomics Theory I (PhD-level) Introduction to Advanced Macroeconomic Analysis oder Advanced Macroeconomic Analysis I (PhD-level)	12 LP			
101					
102					
103					
104	<b>Wahlpflichtmodule Volkswirtschaftslehre</b> Advanced Monetary Economics Advanced International Trade: Theory and Empirics Competition Policy Decision-Making under Uncertainty Empirical Labor Economics Information Economics Public Economics Advanced Labor Economics	6 LP	12 LP		
105					
106					
107					
108					
109					
110					
111					
	<b>Wahlpflichtmodule</b>		18 LP	30 LP	
	<b>Überfachlicher Wahlpflichtbereich</b>				10 LP
	<b>Masterarbeit</b>				20 LP
LP je Semester		30 LP	30 LP	30 LP	30 LP

<sup>1</sup> Das 3. Semester eignet sich besonders für ein Studium an einer Universität im Ausland. Zur Vereinfachung der Anrechnung der an der ausländischen Universität erbrachten Studienleistungen und Prüfungen wird der vorherige Abschluss eines Learning Agreements empfohlen.

# Fachspezifische Prüfungsordnung für den Masterstudiengang „Volkswirtschaftslehre“

Gemäß § 17 Abs. 1 Ziffer 3 der Verfassung der Humboldt-Universität zu Berlin in der Fassung vom 24. Oktober 2013 (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 47/2013) hat der Fakultätsrat der Wirtschaftswissenschaftlichen Fakultät am 25. Mai 2016 folgende Prüfungsordnung erlassen:\*

- § 1 Anwendungsbereich
- § 2 Regelstudienzeit
- § 3 Prüfungsausschuss
- § 4 Modulabschlussprüfungen
- § 5 Rücknahme von Prüfungsanmeldungen
- § 6 Abschlussnote
- § 7 Akademischer Grad
- § 8 In-Kraft-Treten

Anlage: Übersicht über die Prüfungen

## § 1 Anwendungsbereich

Diese Prüfungsordnung enthält die fachspezifischen Regelungen für den Masterstudiengang Volkswirtschaftslehre. Sie gilt in Verbindung mit der fachspezifischen Studienordnung für den Masterstudiengang Volkswirtschaftslehre und der Fächerübergreifenden Satzung zur Regelung von Zulassung, Studium und Prüfung (ZSP-HU) in der jeweils geltenden Fassung.

## § 2 Regelstudienzeit

Der Masterstudiengang Volkswirtschaftslehre hat eine Regelstudienzeit von vier Semestern.

## § 3 Prüfungsausschuss

Für die Prüfungsangelegenheiten des Masterstudienganges Volkswirtschaftslehre ist der Prüfungsausschuss Volkswirtschaftslehre zuständig. Der Ausschuss wird auf Vorschlag der im Fakultätsrat der Wirtschaftswissenschaftlichen Fakultät vertretenen Gruppen durch den Fakultätsrat für 2 Jahre eingesetzt.

## § 4 Modulabschlussprüfungen

Mündliche Modulabschlussprüfungen werden in Anwesenheit einer sachkundigen Beisitzerin oder eines sachkundigen Beisitzers abgenommen, soweit nicht nach Maßgabe der ZSP-HU zwei Prüferinnen und Prüfer bestellt werden. Die Beisitzerin oder der Beisitzer beobachtet und protokolliert die Prüfung. Sie oder er beteiligt sich nicht am Prüfungsgespräch und der Bewertung.

## § 5 Rücknahme von Prüfungsanmeldungen

Prüfungsanmeldungen können bis zum Ablauf des dritten Arbeitstages (Montag bis Freitag) vor einem Prüfungstermin oder Beginn einer Bearbeitungszeit ohne Angabe von Gründen zurückgenommen werden. Für die Einhaltung der Fristen sind die Studierenden verantwortlich.

## § 6 Abschlussnote

(1) Die Abschlussnote des Masterstudienganges Volkswirtschaftslehre wird aus den Noten der Modulabschlussprüfungen des Pflicht- und des fachlichen Wahlpflichtbereichs und der Note der Masterarbeit, gewichtet nach den gemäß Anlage für die Module ausgewiesenen Leistungspunkten, berechnet. Zur Berechnung der Abschlussnote werden im Fachlichen Wahlpflichtbereich die besten Noten in dem in der Anlage spezifizierten Umfang berücksichtigt. Darüber hinausgehende Noten für Modulabschlussprüfungen bleiben unberücksichtigt.

(2) Modulabschlussprüfungen, die nicht benotet werden oder im Rahmen einer Anrechnung mangels vergleichbarer Notensysteme lediglich als „bestanden“ ausgewiesen werden, sowie die für die entsprechenden Module ausgewiesenen Leistungspunkte werden bei den Berechnungen nach Abs. 1 nicht berücksichtigt.

## § 7 Akademischer Grad

Wer den Masterstudiengang Volkswirtschaftslehre erfolgreich abgeschlossen hat, erlangt den akademischen Grad „Master of Science“ (abgekürzt „M.Sc.“).

## § 8 In-Kraft-Treten

(1) Diese Prüfungsordnung tritt am Tage nach ihrer Veröffentlichung im *Amtlichen Mitteilungsblatt der Humboldt-Universität zu Berlin* in Kraft.

(2) Diese Prüfungsordnung gilt für alle Studentinnen und Studenten, die ihr Studium nach dem In-Kraft-Treten dieser Prüfungsordnung aufnehmen oder nach einem Hochschul-, Studiengangs- oder Studienfachwechsel fortsetzen.

\* Die Universitätsleitung hat die Prüfungsordnung am 19. Juli 2016 bestätigt.

(3) Für Studentinnen und Studenten, die ihr Studium vor dem In-Kraft-Treten dieser Prüfungsordnung aufgenommen oder nach einem Hochschul-, Studiengangs- oder Studienfachwechsel fortgesetzt haben, gilt die Prüfungsordnung vom 28. Januar 2008 (Amtliches Mitteilungsblatt der Humboldt-Universität zu Berlin Nr. 02/2008) übergangsweise fort. Alternativ können sie diese Prüfungsordnung einschließlich der zugehörigen Studienordnung wählen. Die Wahl muss schriftlich gegenüber dem Prüfungsbüro erklärt werden und ist unwiderruflich. Mit Ablauf des 30. September 2019 tritt die Prüfungsordnung vom 28. Januar 2008 außer Kraft. Das Studium wird dann auch von den in Satz 1 benannten Studentinnen und Studenten nach dieser Prüfungsordnung fortgeführt. Bisherige Leistungen werden entsprechend § 110 ZSP-HU berücksichtigt.

**Anlage: Übersicht über die Prüfungen**

**Masterstudiengang Volkswirtschaftslehre (120 LP)<sup>2</sup>**

Nr. des Moduls	Modul	LP	Fachspezifische Zulassungsvoraussetzungen für die Prüfung	Form, Dauer/ Bearbeitungszeit/Umfang, ggf. Sprache der Prüfung im Sinne des § 108 Abs. 2 ZSP-HU	Benotung
<b>Pflichtbereich (32 LP)</b>					
8.2	Econometric Methods	12	keine	Written exam (150 min)	ja
	Masterarbeit	20	keine	Masterarbeit ist innerhalb von 90 Tagen zu erstellen und soll in der Regel einen Umfang von ca. 100.000 -120.000 Zeichen ohne Leerzeichen (ca. 60 Textseiten ohne Anhang) haben.	ja
<b>Fachlicher Wahlpflichtbereich (78 LP) (die 58 LP der bestbenoteten Module gehen in die Benotung ein)</b>					
<b>Von den 78 LP sind 12 LP aus dem Bereich A: Mikro- und Makroökonomie, 18 LP aus dem Bereich B: Volkswirtschaftslehre, 30 LP aus dem Bereich C: Volkswirtschaftslehre (24 LP) und Methodische Grundlagen (6 LP) und 18 LP aus den Bereichen A - D zu wählen.</b>					
<b>Bereich A: Mikro- und Makroökonomie</b>		<b>12</b>			
100	Introduction to Advanced Microeconomic Analysis	6	keine	Written exam (90 min)	ja
101	or Advanced Microeconomic Theory I (PhD-level)	6	keine	Written exam (180 min)	
102	Introduction to Advanced Macroeconomic Analysis	6	keine	Written exam (90 min)	ja
103	or Advanced Macroeconomic Analysis I (PhD-level)	6	keine	Written exam (90 min)	
<b>Bereich B: Volkswirtschaftslehre</b>		<b>18</b>			
104	Advanced Monetary Economics	6	keine	Written exam (90 min)	ja
105	Advanced International Trade: Theory and Empirics	6	keine	Written exam (90 min)	ja
106	Competition Policy	6	keine	Written exam (90 min)	ja

<sup>2</sup> In den englischsprachigen Modulen wird die Modulabschlussprüfung in englischer Sprache abgenommen.

107	Decision-Making under Uncertainty	6	keine	Writen exam (90 min)	ja
108	Empirical Labor Economics	6	keine	Writen exam (90 min)	ja
109	Information Economics	6	keine	Writen exam (90 min)	ja
110	Public Economics	6	keine	Writen exam (90 min)	ja
111	Advanced Labor Economics	6	keine	Writen exam (90 min)	ja
<b>Bereich C: Volkswirtschaftslehre und Methodische Grundlagen 30</b>					
<b>Volkswirtschaftslehre 24</b>					
121	Advanced Macroeconomic Analysis II (PhD-level)	6	keine	Writen exam (90 min)	ja
122	Topics in Macroeconomics	6	keine	Writen exam (90 min) or term paper (45,000 ZoL)	ja
123	Topics in Labor Economics and Macroeconomics	6	keine	Writen exam (90 min) or term paper (45,000 ZoL)	ja
130	European Economic History I	6	keine	Writen exam (90 min)	ja
131	European Economic History II	6	keine	Writen exam (90 min)	ja
132	Economic History	6	keine	Term paper (40,000 ZoL)	ja
133	Spatial Economics	6	keine	Term paper (40,000 ZoL)	ja
134	From Paul A. Samuelson to Elinor Ostrom - History of Economic Thought in the 20th Century	6	keine	Term paper (45.000 ZoL)	ja
140	Selected Topics in Industrial Organization	6	keine	Term paper (30.000-45.000 ZoL)	ja
150	Advanced Microeconomics	6	keine	Term paper (30,000 ZoL)	ja
151	Behavioral Economics	6	keine	Term paper (30,000 ZoL)	ja
152	Empirical Methods in Applied Microeconomics	6	keine	Term paper (30,000 ZoL)	ja
153	Advanced Experimental Economics	6	keine	Term paper (30,000 ZoL)	ja
154	Trust and Reputation	6	keine	Term paper (30,000 ZoL)	ja
155	Advanced Microeconomic Theory II (PhD-level)	6	keine	Writen exam (90 min)	ja
160	Theory of Incentives	6	keine	Writen exam (90 min)	ja
161	Game Theory	6	keine	Writen exam (90 min)	ja
162	Topics in Microeconomics	6	keine	Writen exam (90 min) or term paper	ja

170	Social Preferences		6	keine			per (45,000 ZoL)					ja	
171	Seminar in Public Economics		6	keine			Written exam (90 min)					ja	
172	Topics in Public Economics		6	keine			Term paper (40.000 ZoL)					ja	
180	Economic Growth		6	Keine			Written exam (90 min)					ja	
190	Emerging Markets		6	keine			Multimedia exam (30 min)					ja	
201	Selected Topics in Economics		6	keine			Written exam (90 min) or term paper (45,000 ZoL)					ja	
<b>Methodische Grundlagen</b>													
7	Business Analytics and Data Science		6	keine								ja	
70	Digital Marketing and Web Analytics		6	keine								ja	
71	Seminar Information Systems		6	keine								ja	
72	Applied Predictive Analytics		6	keine								ja	
73	IT Security and Privacy		6	keine								ja	
8.1	Applied Econometrics		6	keine								ja	
80	Time Series Analysis		6	keine								ja	
81	Analysis of Panel Data		6	keine								ja	
82	Microeconometrics		6	keine								ja	
83	Advanced Econometrics		6	keine								ja	
84	Estimation of Treatment Effects		6	keine								ja	
85	Econometric Projects		6	keine								ja	
86	Selected Topics in Econometrics		6	keine								ja	
9	Multivariate Statistical Analysis		6	keine								ja	

90	Statistical Programming Languages	6	keine		Term paper (45,000 ZoL)	ja
91	Datenanalyse I	6	keine		Klausur (90 min) oder mündliche Prüfung (30 min)	ja
92	Datenanalyse II	6	keine		Klausur (90 min) oder mündlichen Prüfung (30 min)	ja
93	Statistics of Financial Markets	6	keine		Oral exam (30 min)	ja
94	Advanced Methods in Quantitative Finance	6	keine		Oral exam (60 min)	ja
95	Selected Topics in Finance, Insurance and Mathematical Statistics	6	keine		Oral exam (60 min)	ja
96	Multivariate Statistics and Non- and Semiparametric Modeling	6	keine		Written exam (180 min)	ja
97	Statistical Seminars	6	keine		Oral exam (45 min)	ja
98	Selected Topics in History of Statistics	6	keine		Term paper (45,000 ZoL)	ja
99	Privatissimum	6	keine		Oral exam (45 min)	ja
202	Selected Topics in Quantitative Methods	6	keine		Written exam (90 min) or term paper (45,000 ZoL)	ja
<b>Bereich D: Wirtschaftswissenschaft</b> (Es können Module der Bereiche A-D gewählt werden.)		<b>18</b>				
1	Financial Accounting and Analysis	6	keine			
10	Accounting: Valuation	6	keine			ja
11	Accounting: Advanced Topics and Cases in Accounting	6	keine			ja
12	Accounting: Accounting Theory and Earnings Management	6	keine			ja
13	Accounting: Financial Accounting Research Group	6	keine			ja
14	Accounting: Master's Thesis Seminar Accounting	6	keine			ja
2	Grundzüge der Besteuerung	6	keine			ja
20	Umwandlung von Unternehmen	6	keine			ja
21	Steuerwirkungslehre	6	keine			ja



22	Internationale Unternehmensbesteuerung	6	keine		ja
23	Steuerliche Gewinnermittlung / Umsatzsteuer und Verfahrensrecht	6	keine		ja
24	Master Tax Seminar	6	keine		ja
3	Marketing Management	6	keine		ja
30	Customer Analytics and Customer Insights	6	keine		ja
31	Advanced Marketing Modeling	6	keine		ja
32	Seminar Marketing	6	keine		ja
4	Organization and Management	6	keine		ja
40	Personnel Economics	6	keine		ja
41	Advanced Topics in Management	6	keine		ja
42	Incentives in Organizations	6	keine		ja
45	Financial Contracting	6	keine		ja
46	Network Based Energy Systems	6	keine		ja
47	Competition and Cooperation	6	keine		ja
5	Economics of Entrepreneurship	6	keine		ja
50	Entrepreneurial and Behavioral Decision Making	6	keine		ja
51	Design of Decision Experiments	6	keine		ja
52	Master Seminar on Entrepreneurship and Innovation	6	keine		ja
6	Corporate Finance	6	keine		ja
60	Advanced Corporate Finance	6	keine		ja
61	Private Equity	6	keine		ja
62	Introduction to Financial Economics	6	keine		ja
63	Case Seminar Advanced Corporate Finance	12	keine		ja
64	Master Thesis Seminar Corporate Finance	6	keine		ja
65	Master Thesis Seminar Financial Economics	6	keine		ja
66.1	Advanced Financial Economics – Corporate Finance	6	Keine		ja

Gemäß Anlage der Prüfungsordnung für den Masterstudiengang Betriebswirtschaftslehre in der geltenden Fassung

66.2	Advanced Financial Economics – Asset Pricing	6	keine	Gemäß Anlage der Prüfungsordnung für den Masterstudiengang Betriebswirtschaftslehre in der geltenden Fassung	ja
67	Finanzierungstheorie	6	keine		ja
68	Market Microstructure	6	keine		ja
69	Seminar Topics in Finance	6	keine		ja
200	Selected Topics in Business Administration	6	keine		ja
<b>Überfachlicher Wahlpflichtbereich</b>					
Im überfachlichen Wahlpflichtbereich sind Module aus den hierfür vorgesehenen Modulkatalogen anderer Fächer oder zentraler Einrichtungen nach freier Wahl zu absolvieren.		10	Die Module werden nach den Bestimmungen der anderen Fächer bzw. zentralen Einrichtungen abgeschlossen. Über die Berücksichtigung der Leistungen entscheidet der Prüfungsausschuss der Wirtschaftswissenschaftlichen Fakultät.	Die Module werden ohne Note berücksichtigt.	

**Überfachlicher Wahlpflichtbereich (ÜWP) für andere Masterstudiengänge**

Nr. des Moduls	Modul	LP	Fachspezifische Zulassungsvoraussetzungen für die Prüfungen	Benotung
ÜWP MA-VWL 1	Introduction to Advanced Microeconomic and Macroeconomic Analysis	10	keine	ja
			Form, Dauer/ Bearbeitungszeit/Umfang, ggf. Sprache der Prüfung im Sinne des § 108 Abs. 2 ZSP-HU	
			Written exam Introduction to Advanced Microeconomics Analysis (90 min) and preparation	
			or	
			written exam Introduction to Advanced Macroeconomic Analysis (90 min) and preparation	