

Module	Futures and Options		
Area of study/Profile	Quantitative methods, BWL		
Recommended semester	Second year	Mandatory/elective	Elective
Instructor	Dr. Ernst August von Hammerstein	Work load	120 hours
ECTS (credit points)	6	Contact hours (SWS)	2+2
Course type	Lecture + Tutorial	Language	English
Rotation	Every winter semester		
Requirements	Principles of Finance		
Learning/ qualification target	Introduction to basic principles of risk-neutral valuation of futures, standard and exotic options as well as interest rate derivatives.		
Content	<p>This course covers an introduction to financial markets and products. Besides futures and standard put and call options of European and American type we also discuss interest-rate sensitive instruments such as swaps.</p> <p>For the valuation of financial derivatives we first introduce financial models in discrete time as the Cox-Ross-Rubinstein model and explain basic principles of risk-neutral valuation. Finally, we will discuss the famous Black-Scholes model which represents a continuous time model for option pricing.</p>		
Module title	Futures and Options		
Examination type	120 min. written examination at the end of the semester		
Literature	<p>Chance, D.M., Brooks, R.: <i>An Introduction to Derivatives and Risk Management</i>, 8th ed., South-Western, 2009.</p> <p>Hull, J.C.: <i>Options, Futures, and other Derivatives</i>, 7th ed., Prentice Hall, 2009.</p> <p>Bielecki, T.R.; Rutkowski, M., <i>Credit Risk: Modeling, Valuation and Hedging</i>, Springer, 2002.</p> <p>Strong, R.A.: <i>Derivatives. An Introduction</i>, 2nd ed., South-Western, 2004.</p>		
Additional information & links	Course outlines, dates, and further information can be found on the webpage of the department: http://www.finance.uni-freiburg.de/		

The course can be credited for the account:

- x M.Sc. VWL (alte PO)
- x M.Sc. VWL (neue PO)
 - hier im **Spezialisierungsbereich** Accounting, Finance and Taxation
- x M.Sc. in Economics
 - in the **Profile** Finance