

UČNI NAČRT PREDMETA / COURSE SYLLABUS (leto / year 2016/17)						
<b>Predmet:</b>		Ekonometrija 1				
<b>Course title:</b>		Econometrics 1				
<b>Študijski program in stopnja</b> Study programme and level		<b>Študijska smer</b> Study field		<b>Letnik</b> Academic year	<b>Semester</b> Semester	
Univerzitetni študijski program Finančna matematika		ni smeri		3	drugi	
First cycle academic study programme Financial Mathematics		none		3	second	
<b>Vrsta predmeta / Course type</b>				izbirni / elective		
<b>Univerzitetna koda predmeta / University course code:</b>				M0336		
<b>Predavanja</b> Lectures	<b>Seminar</b> Seminar	<b>Vaje</b> Tutorial	<b>Klinične vaje</b> work	<b>Druge oblike študija</b>	<b>Samost. delo</b> Individ. work	<b>ECTS</b>
45		30			105	6
<b>Nosilec predmeta / Lecturer:</b>		prof. dr. Miroslav Verbič				
<b>Jeziki / Languages:</b>		<b>Predavanja / Lectures:</b>		slovenski / Slovene		
		<b>Vaje / Tutorial:</b>		slovenski / Slovene		
<b>Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:</b>				<b>Prerequisites:</b>		
Vpis v letnik študija.				Enrolment in the programme.		
<b>Vsebina:</b>				<b>Content (Syllabus outline):</b>		

1. Uvod v ekonometrijo 2. Model multiple regresije 3. Preizkušanje domnev 4. Napovedovanje na podlagi regresijskega modela 5. Preverjanje specifikacije in izbira funkcijske oblike regresijskega modela 6. Preverjanje predpostavk klasičnega regresijskega modela 7. Regresijski model z nepravimi pojasnjevalnimi spremenljivkami 8. Modeli razporejenih odlogov	1. Introduction to econometrics 2. Multiple regression model 3. Hypothesis testing 4. Prediction with multiple regression 5. Model specification and diagnostic testing 6. Relaxing the assumptions of the classical model 7. Dummy variable regression models 8. Distributed-lag models
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#### **Temeljni literatura in viri / Readings:**

Gujarati, D. N.: Basic Econometrics: Fourth Edition. Boston: McGraw-Hill, 2003.

Verbič, M., R. Rogelj in L. Pfajfar: Ekonometrični obrazci in postopki. Ljubljana: Ekonomska fakulteta, 2011.

Baltagi, B. H.: Econometrics: Fourth Edition. Berlin: Springer-Verlag, 2008.

Evans, M. K.: Macroeconomic Activity: Theory, Forecasting, and Control. An Econometric Approach. New York: Harper #ali#, Row, 1969.

Fox, J.: Regression Diagnostics. London: Sage Publications, 1991.

Greene, W. H.: Econometric Analysis: Sixth Edition. New Jersey: Prentice Hall, 2008.

Johnston, J. in J. DiNardo: Econometric Methods: Fourth Edition. Boston: McGraw-Hill, 1997.

Kennedy, P.: A Guide to Econometrics: Sixth Edition. Malden, MA: Blackwell Publishing, 2008.

Pindyck, R. S. in D. L. Rubinfeld: Econometric Models and Economic Forecasts: Fourth Edition. Boston: Irwin/McGraw-Hill, 1998.

Stock, J. H. in M. W. Watson: Introduction to Econometrics: Second Edition. Boston: Addison-Wesley, 2007.

Wooldridge, J.: Introductory Econometrics: A Modern Approach, Fourth Edition. Mason, OH: South-Western College Publishing, 2009.

#### **Cilji in kompetence:**

- Razširiti in poglobiti znanje kvantitativnih metod z osnovnimi ekonometričnimi metodami.
- Spoznati teoretične temelje ekonometričnih metod.
- Pridobiti znanje za praktično uporabo teoretičnih konceptov.
- Razviti sposobnost študentov za izbiro ustrezne metode pri analizi povezav med ekonomskimi kategorijami.
- Razviti sposobnost študentov za vsebinsko interpretacijo dobljenih rezultatov.

#### **Objectives and competences:**

- To improve and expand the knowledge of quantitative skills with basic econometric methods.
- To become acquainted with the theoretical foundations of econometric methods.
- To obtain the skills necessary for the application of theoretical concepts.
- To develop the capabilities of students to choose appropriate methodology for the analysis of relationships in economics and finance.
- To develop capabilities of students for interpretation of the results.

#### **Predvideni študijski rezultati:**

Vsebine predmeta širijo in poglobljajo znanja o sodobnih kvantitativnih metodah za odkrivanje in analiziranje ekonomskih in finančnih zakonitosti. Namenjene so predvsem spoznavanju postopkov za soočenje ekonomskih in finančnih teorij s stvarnostjo, to je kvantitativnemu ocenjevanju in merjenju v toriji spoznanih zakonitosti. Poznavanje temeljnih ekonometričnih metod in postopkov omogoča preverjanje številnih zakonitosti na podlagi dejanskih podatkov nekega gospodarstva. Kvantitativno izmerjene zakonitosti so tako lahko neposredno uporabne pri sprejemanju odločitev oziroma vodenju

#### **Intended learning outcomes:**

The course expands and enriches the knowledge of contemporary quantitative methods for detection and analysis of economic and financial developments. It is intended for comprehension of procedures for facing economic and financial theories with the data, i.e. for quantitative estimation and measurement of theoretical concepts. The expertise of basic econometric methods and procedures enables testing of numerous hypotheses based on economic and financial data. Quantitatively measured concepts can thus directly facilitate economic decision-making and conducting of economic policy at all

ekonomske politike na vseh ravneh odločanja.

Razumevanje teoretičnih izhodišč obravnavanih metod in postopkov razvija ustrezno kritičnost pri njihovi uporabi. Predvsem naj bi se razvila ustrezna kritičnost pri razlagi ugotovitev preverjanih zakonitosti in primernosti na njihovi osnovi sprejetih odločitev. Poznavanje temeljnih ekonometričnih metod omogoča hitro in učinkovito preverjanje zakonitosti v gospodarstvu. Te se lahko s pridom uporabljajo pri oblikovanju najprimernejših ekonomskih odločitev oziroma ukrepov v praksi.

levels of the decision-making process.

Comprehension of theoretical basic premises of the discussed methods and procedures develops critical thinking of its application. First and foremost, a sufficient level of critical thinking should be developed for the interpretation of findings and suitability assessment of decision-making, based on such findings. A comprehensive knowledge of basic econometric methods enables fast and efficient testing of economic and financial relationships. It can thus be used for application of the most efficient and effective economic decisions and measures.

**Metode poučevanja in učenja:**

Predavanja in vaje bodo potekala v skladu z urnikom in terminskim načrtom.

Končna izpitna ocena se oblikuje na podlagi rezultatov neobvezne pisne preizkušnje in pisnega izpita. Opravljanje preizkušnje ni pogoj za pristop k izpitu, vsekakor pa je priporočljivo, saj stimulira sprotno delo, hkrati pa predstavlja tudi pomemben delež v skupnem številu točk pri oblikovanju končne izpitne ocene.

**Learning and teaching methods:**

Lectures and exercise sessions are conducted according to the time schedule.

The final grade is formed based on the result of the midterm exam, which is not compulsory, and of the final written exam. The midterm exam is not a precondition for taking the final exam, but it is very much advisable. At the same time, the midterm exam represents an important share of the final grade.

**Načini ocenjevanja:**

Delež (v %) /

Weight (in %)

**Assessment:**

Pisni izpit - 80%	80%	Final written exam - 80%
Kolokvij - 20%	20%	Midterm exam - 20%

**Reference nosilca / Lecturer's references:**

POLANEC, Sašo, AHČAN, Aleš, VERBIČ, Miroslav. Retirement decisions in transition : microeconomic evidence from Slovenia. Post-communist economies, ISSN 1463-1377, 2013, vol. 25, no. 1, str. 99-118, ilustr. [COBISS.SI-ID 1672846]

ČOK, Mitja, SAMBT, Jože, KOŠAK, Marko, VERBIČ, Miroslav, MAJCEN, Boris. Distribution of personal income tax changes in Slovenia. Post-communist economies, ISSN 1463-1377, Dec. 2012, vol. 24,

no. 4, str. 503-515, ilustr. [COBISS.SI-ID 1667726]

HOMMES, Carsien Harm, KISELEVA, Tatiana, KUZNETSOV, Yuri, VERBIČ, Miroslav. Is more memory in evolutionary selection (de)stabilizing?. *Macroeconomic dynamics*, ISSN 1365-1005, 2012, vol. 16, no. 3, str. 335-357. [COBISS.SI-ID 1651854]

VERBIČ, Miroslav (urednik). *Advances in econometrics : theory and applications*. Rijeka: InTech, 2011. IX, 116 str., tabele, graf. prikazi. ISBN 978-953-307-503-7. [COBISS.SI-ID 20216550]

MAJCEN, Boris, VERBIČ, Miroslav, BAYAR, Ali, ČOK, Mitja. The income tax reform in Slovenia : should the flat tax have prevailed?. *Eastern European economics*, ISSN 0012-8775, Sep./Oct. 2009, vol. 47, no. 5, str. 5-24. [COBISS.SI-ID 1531790]

VERBIČ, Miroslav. A note on varying the parameters of the Slovenian pension system : an analysis of supplementary pension insurance. *Post-communist economies*, ISSN 1463-1377, Sep. 2009, vol. 21, no. 3, str. 373-382, graf. prikazi. [COBISS.SI-ID 1524622]

VERBIČ, Miroslav, KUZMIN, Franc. Coefficient of structural concordance and an example of its application : labour productivity and wages in Slovenia. *Panoeconomicus*, ISSN 1452-595X, 2009, god. 56, no. 2, str. 227-240. [COBISS.SI-ID 1509518]

VERBIČ, Miroslav, SLABE ERKER, Renata. An econometric analysis of willingness-to-pay for sustainable development : a case study of the Volčji Potok landscape area. *Ecological economics*, ISSN 0921-8009. [Print ed.], 2009, vol. 68, iss. 5, str. 1316-1328. [COBISS.SI-ID 1489550]

VERBIČ, Miroslav. On the role of memory in an asset pricing model with heterogeneous beliefs. *Financial theory and practice*, ISSN 1845-9757, 2008, vol. 32, no. 2, str. 195-228. [COBISS.SI-ID 1449358]

VERBIČ, Miroslav. Modelling the pension system in an overlapping-generations general equilibrium modelling framework. *Economic and business review*, ISSN 1580-0466. [Tiskana izd.], Jun. 2008, vol. 10, no. 2, str. 117-152, ilustr. [COBISS.SI-ID 17951462]

VERBIČ, Miroslav. Dinamični model splošnega ravnovesja slovenskega gospodarstva s poudarkom na pokojninskem sistemu. 1. natis. Ljubljana: Fakulteta za družbene vede, 2007. 385 str., graf. prikazi, tabele. ISBN 978-961-235-301-8. [COBISS.SI-ID 235824640]

VERBIČ, Miroslav. Varying the parameters of the Slovenian pension system : an analysis with an overlapping-generations general equilibrium model. *Post-communist economies*, ISSN 1463-1377, 2007, vol. 19, no. 4, str. 449-470, tabele. [COBISS.SI-ID 1395342]

VERBIČ, Miroslav. A quarterly econometric model of the Slovenian economy. *Economic and business review*, ISSN 1580-0466. [Tiskana izd.], 2006, vol. 8, no. 3, str. 215-244, tabele. [COBISS.SI-ID 1309582]

VERBIČ, Miroslav. Discussing the parameters of preservation of perishable goods in a cold logistic

chain model. Applied economics, ISSN 0003-6846, 2006, vol. 38, no. 2, str. 137-147, graf. prikazi. [COBISS.SI-ID 1261966]

VERBIČ, Miroslav. Makroekonomska analiza temeljnih zakonitosti slovenskega gospodarstva. Ljubljana: Inštitut za ekonomska raziskovanja: = Institute for Economic Research, 2005. 150 str., graf. prikazi. ISBN 961-6543-05-9. [COBISS.SI-ID 219519744]