

NAZIV PREDMETA		Game Theory Basics				
Kod	PMIG20	Godina studija	the first and the second year of graduate study			
Nositelj/i predmeta	Damir Vukičević	Bodovna vrijednost (ECTS)	5,0			
Suradnici		Način izvođenja nastave (broj sati u semestru)	P	S	V	T
			30		30	
Status predmeta	Elective and compulsory course	Postotak primjene e-učenja	15			
OPIS PREDMETA						
Ciljevi predmeta	Student learns the basics of game theory. He is capable to explain basic concepts of game theory, solve simpler problems in game theory and recognize real-life situations on which game theory can be applied. He can note and comprehend interplay between game theory and economics.					
Uvjeti za upis predmeta i ulazne kompetencije potrebne za predmet	Prerequisites: introductory mathematical course completed. Required competencies: knowledge of elementary mathematics basic knowledge of integrals and derivatives.					
Očekivani ishodi učenja na razini predmeta (4-10 ishoda učenja)	Student is able to: - define basic notions related to dominant strategies, Nash's equilibria, evolutionary and economical models; - analyze different types of Nash's equilibria; - analyze outcomes of simpler games - solve simpler games; - compare different auction types; - analyze axioms of utility function and Nash axioms; - apply game theory on simpler economic models.					
Sadržaj predmeta detaljno razrađen prema satnici nastave	dominant and dominated strategies (2) pure Nash equilibrium, zero-sum games, mixed Nash equilibrium (4) economical models (2) evolutionary models (2) exemplary games (2) finite games and backward induction(2) games of complete and non-complete information (2) repetitive games and moral risk (2) exemplary games (2) auctions (2) utility function (2) negotiation problem (4)					
Vrste izvođenja nastave:	Lectures and exercises.					
Obveze studenata	Lectures attendance and passing colloquium exams					
Praćenje rada studenata ( <i>upisati udio u ECTS</i> )	Lecture attendance: 1,5 ECTS. Colloquiums: 1,5 ECTS Final (written and oral) exam: 2 ECTS.					

<p><i>bodovima za svaku aktivnost tako da ukupni broj ECTS bodova odgovara bodovnoj vrijednosti predmeta):</i></p>	
<p>Ocjenjivanje i vrjednovanje rada studenata tijekom nastave i na završnom ispitu</p>	<p>Colloquiums, final (written and oral) exam</p>
<p>Obvezna literatura (dostupna u knjižnici i putem ostalih medija)</p>	<p>1. Open Yale Course on Game Theory. <a href="http://oyc.yale.edu/economics/econ-159">http://oyc.yale.edu/economics/econ-159</a>  2. M. J. Osborne, A. Rubinstein: A Course in Game Theory, MIT Press, 1998</p>
<p>Dopunska literatura</p>	<p>1. J.H.Conway, On Numbers and Games, Academic Press, 1976  2. E. Berlekamp, H. Conway, R.Guy, Winning ways for your mathematical plays, AK Peters Ltd, 2001 (Vol 1)  3. E. Berlekamp, H. Conway, R.Guy, Winning ways for your mathematical plays, AK Peters Ltd, 2001 (Vol 2)  4. E. Berlekamp, H. Conway, R.Guy, Winning ways for your mathematical plays, AK Peters Ltd, 2001 (Vol 3)  5. E. Berlekamp, H. Conway, R.Guy, Winning ways for your mathematical plays, AK Peters Ltd, 2001 (Vol 4)</p>
<p>Načini praćenja kvalitete koji osiguravaju stjecanje utvrđenih ishoda učenja</p>	<p>Statistics of exam results and student's course evaluation (survey according to rules of the University of Split).</p>
<p>Ostalo (prema mišljenju predlagatelja)</p>	