

Program		Type of studies (cycle)	Third cycle		
		Name of the program	SEE Doctoral Studies in Mathematical Science		
<b>Course</b>					
Course title		<b>Research methodology and academic skills</b>			
Course code	Semester	Course status	ECTS credits	Contact hours	
	I		10	30	
Teaching staff	Teacher	Prof. Dr. Muharem Avdispahić/Prof. Dr. Senada Kalabušić			
	Other staff	Prof. Dr. Steve Quarrie			
Course goals	<p>The course will acquaint PhD students with the research standards in mathematics. It will offer know-how that could assist candidates' choice of the area of dissertation and the conduct of research. The attention will be paid to questions that doctoral students are typically faced with: how is a good quality mathematical research to be done? how to choose an advisor? what are established rules in mathematical writing? where to publish? what kind of conferences to take part in? how to collaborate at an international level?, etc.</p> <p>In addition to the main goal - development of research competences, the aim is also to assist the candidates in acquiring other professional skills that are useful for a career of a present-day mathematician.</p>				
Course content/topics					
<ul style="list-style-type: none"> <li>• Principles of mathematical research</li> <li>• Mathematical writing and publishing</li> <li>• Presentation and communication skills</li> <li>• International collaboration</li> <li>• Interdisciplinarity&amp;multidisciplinarity</li> <li>• Project management</li> <li>• Curriculum development and teaching</li> <li>• Student supervision</li> </ul>					
<b>LITERATURE</b>		<b>Grading</b>			
1. T. Gowers (ed.), <i>The Princeton Companion to Mathematics</i> , Princeton University Press, 2008 2. N. J. Higham, <i>Handbook of Writing for the Mathematical Sciences</i> , 2nd ed., SIAM: Society for Industrial and Applied Mathematics, 1998 3. S. G. Krantz, <i>A Mathematician's Survival Guide: Graduate School and Early Career Development</i> , American Mathematical Society, 2003 4. N. E. Steenrod, P. R. Halmos, M. M. Schiffer and J. A. Dieudonne, <i>How to write mathematics</i> , 6th printing American Mathematical Society, 2000			Criterion	Points	Cut-off points
		1.	Written assignment	30	16
		2.	Project	40	22
		3.	Final exam	30	17
		Total			100