

General Information			
Course name ÚINF/KRP1/15	Cryptographic Protocols	ECTS Credits	4
		Semester	1
Aims			
To teach students about the design and verification of cryptographic protocols			
Content			
Authentication and key establishment using shared and public key cryptography, key agreement protocols, conference key agreement, zero-knowledge protocols.			
Assessment Methods and Criteria			
<p>1. Attendance - students are expected to attend each class according to the schedule. Should the student miss three or more classes, he/she will not receive credits for the course no matter what his/her overall results are on the tests(s). The student must be on time for class.</p> <p>2. Active participation - students are required to do their best with respect to active participation in seminar sessions:</p> <p>Assessment: Home works 35%, active work on seminar + project 25%, test 40%.</p>			
<p><b>Grading Scale (in %):</b></p> <p>A 91-100%</p> <p>B 81-90%</p> <p>C 71-80%</p> <p>D 61-70%</p> <p>E 51-60%</p> <p>FX 50 and less</p> <p><b>Grading System:</b></p> <p>The University recognizes the following six degrees for the evaluation of the study results:</p> <p>a) A – excellent (excellent results) (numerical value 1)</p> <p>b) B – very good (above average results) (1.5)</p> <p>c) C – good (average results) (2)</p> <p>d) D – satisfactory (acceptable results) (2.5)</p> <p>e) E – sufficient (results meet the minimum criteria) (3)</p> <p>f) FX –failed (requires further work) (4)</p>			
Bibliography			
<p>BOYD, C., MATHURIA, A.: Protocols for Authentication and Key Establishment, Springer, 2003</p> <p>STINSON, D. R.: Cryptography: Theory and Practice, Third Edition, Chapman &amp; Hall/CRC, 2006</p> <p>SCHNEIER, B.: Applied Cryptography, Second Edition, John Wiley &amp; Sons Inc., 1996</p>			

RYAN, P., SCHNEIDER, S.: Modelling and Analysis of Security Protocols, Addison-Wesley, 2001

