

<b>Course title: Proofs in the Graph Theory with Computer</b>	<b>Neptun code: GEMAK421-a</b>
<b>Course coordinator: Dr. József Túri, PhD, associate professor</b>	
type of lesson and number of lessons: <b>lecture (2)</b>	
method of evaluation: colloquium	
curriculum location of the subject: (autumn/spring semester): autumn and spring	
pre-study conditions ( <i>if any</i> ): -	
<b>The task and purpose of the subject:</b>	
The aim of the course is to familiarize students with proofs that are done with a computer (e.g. four-color conjecture).	
<b>Course description:</b>	
In the course, we deal with computer proof methods (e.g. four-color conjecture). Addressing the philosophy of these methods of proof and how they are accepted.	
<b>Required literature:</b>	
<ol style="list-style-type: none"> <li>1. Appel, Kenneth &amp; Haken, Wolfgang &amp; Koch, John, Every Planar map is Four Colorable, Illinois: Journal of Mathematics: vol.21: pp.439-567, 1977. december</li> <li>2. Appel, Kenneth &amp; Haken, Wolfgang, Solution of the Four Color Map Problem, Scientific American, vol.237 no.4: pp.108-121, October 1977.</li> <li>3. Appel, Kenneth &amp; Haken, Wolfgang, Every Planar Map is Four-Colorable. Providence, RI: American Mathematical Society, 1989.</li> </ol>	
<b>Recommended literature:</b>	
<ol style="list-style-type: none"> <li>1. Thomas, Robin, An Update on the Four-Color Theorem (PDF File), Notices of the American Mathematical Society, Volume 45, number 7 (1998)</li> </ol>	