

Course title: Proofs in the Graph Theory with Computer	Neptun code: GEMAK421-a
Course coordinator: Dr. József Túri, PhD, associate professor	
type of lesson and number of lessons: lecture (2)	
method of evaluation: colloquium	
curriculum location of the subject: (autumn/spring semester): autumn and spring	
pre-study conditions (<i>if any</i>): -	
The task and purpose of the subject:	
The aim of the course is to familiarize students with proofs that are done with a computer (e.g. four-color conjecture).	
Course description:	
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.	
Required literature:	
1. Appel, Kenneth & Haken, Wolfgang & Koch, John, Every Planar map is Four Colorable, Illinois: Journal of Mathematics: vol.21: pp.439-567, 1977. december 2. Appel, Kenneth & Haken, Wolfgang, Solution of the Four Color Map Problem, Scientific American, vol.237 no.4: pp.108-121, October 1977. 3. Appel, Kenneth & Haken, Wolfgang, Every Planar Map is Four-Colorable. Providence, RI: American Mathematical Society, 1989.	
Recommended literature:	
1. Thomas, Robin, An Update on the Four-Color Theorem (PDF File), Notices of the American Mathematical Society, Volume 45, number 7 (1998)	