**MTH 711 Selected Topics in Computational Mathematics I Spring 2017**

**Course description:** This course is concerned with analysis of Discontinuous Galerkin Methods for differential equations. We focus on the numerical analysis and implementations of boundary/ initial value problems.

**Recommended prerequisite courses:** Real analysis, Numerical analysis, Partial differential equations, Numerical methods for PDEs I, II

**Instructor:** Chang-Yeol Jung, [cjung@unist.ac.kr](mailto:cjung@unist.ac.kr), Building 108, 301-9, Phone: 3137

**Class hours:** Mon, Wed, 10:30-11:45, Building 108, **Euler (319)**

**Textbook:**

*Discontinuous Galerkin methods for solving elliptic and parabolic equations*, SIAM, Beatrice Riviere: This book is downloadable from UNIST library(<http://library.unist.ac.kr/>)

**Finite element Library: dealii.org**

<https://www.dealii.org/>

**Grading: Several projects (90%): late submission will be graded zero; Attendance and attitude (10%): Up to 4 absences will not be counted**

**Academic integrity:** As future leaders of our society, UNIST students will be held to the highest ethical standards. Hard-working honest students can be assured that I will do my best to preserve the integrity of their good work by being vigilant and promptly and forcefully prosecuting cases of academic dishonesty. Academic dishonesty includes cheating, plagiarizing and inappropriate collaboration, etc.