**School of Mathematics**

**Module MA3424 — Topics in complex analysis II**                    2011-12
(JS & SS Mathematics, JS & SS Two-subject Moderatorship )

**Lecturer:** Dr. Dmitri Zaitsev

**Requirements/prerequisites:**   prerequisite: 2325

**Duration:** Hilary term, 10 weeks

**Number of lectures per week:** 3 lectures including tutorials per week

**Assessment:**

**ECTS credits:**

**End-of-year Examination:**   This module will be examined jointly with MA34243 in a 3-hour examination in Trinity term, except that those taking just one of the two modules will have a 2 hour examination.

**Description:**
   Further detailed information about the course: `http://www.maths.tcd.ie/~zaitsev/342-2011-12/342.html`

**Learning Outcomes:** On sucessful completion of this module, students will be able to:

- give the appropriate definitions, theorems and proofs for the argument principle, open mapping and inverse function theorem

- apply Montel's and Riemann Mapping Theorem to solve basic problems

- formulate mathematical arguments in appropriately precise terms for the subject matter;

- give examples of automorphisms of the Riemann sphere, the complex plane and the disk.

November 2, 2011