The course will be concentrated around the study of global and local cyclotomic fields. Main topics include: analytical functions in local fields; Fermat's equations over cyclotomic fields; the second case of Fermat's Last Theorem for regular exponents via the Kummer approach; divisor class groups of cyclotomic fields and Galois eigenspaces in them; Gauss sums and Stickelberger theorem. It is supposed that the students have 1 year algebra course and are familiar with the theory of divisors in number fields. The book to be used: "Number Theory" by Borevich and Shafarevich.