## NUMBER THEORY SEMINAR

## Fourier Coefficients of Modular and Vector-Valued Forms

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ABSTRACT: The study of modular forms has a long and rich history, particularly in multiplicative number theory. Much of this interest is due to the interesting arithmetic functions that appear as Fourier coefficients of modular forms. In these talks, I will introduce modular forms and their Fourier expansions and give Hecke's estimates for the growth of their coefficients. I will then discuss a result of Knopp and Mason showing that Hecke's method can be extended to get similar growth estimates for holomorphic logarithmic vector-valued modular forms. These talks should be very accessible to graduate students.

> Wednesday, September 19, 2012 2:40 - 4:00 PM Room 527 Wachman Hall Department of Mathematics