Mathematical background

$$v_\pi(s) = \sum_a \pi(a|s) \sum_{s',r} p(s',r|s,a)[r + \gamma v_\pi(s')], \quad \forall s \in S$$

$$Q_{n+1} = (1-\alpha)^n Q_1 + \sum_{i=1}^{n} \alpha(1-\alpha)^{n-i} R_i$$

The bulk of the mathematics of the course centers around summations over states and rewards, with probability distributions that utilize Bayesian notation (i.e. P(A|B)). In many cases these equations are expressed recursively, to enable efficient computation.

If you can roughly parse the above equations, then you have the mathematical background necessary to learn the material