

# Teaching Assistant Management System

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The VCU CS department's undergraduate population is quickly expanding every year as shown in the accompanying chart. As class sizes grow, student outcomes and retention rates depend on effective course management. Undergraduate teaching assistants (TAs) are a major resource in courses, but a management system is needed to most effectively utilize TAs and allow courses to function smoothly. Our solution consists of three components: a data storage system of TAs and course information, a web interface for TAs and professors to manage teaching responsibilities, and a centralized set of documentation for the duties and expectations of TAs and related departmental policies. The management system provides a central method for TA recruitment and evaluation, guidelines for TA training and expectations, allows easy selection of TAs for courses and supervision of TA grading for consistency and reliability. This system aims to benefit faculty by easily delegating course workload to TAs and limiting effort to manage them, to benefit TAs by clearly defining responsibilities and enabling easy communication, and to benefit the department by improving student outcomes with more oversight and maintaining long-term course records. This system may be expanded to manage TAs and course information in other fields or in other universities. The main goal of this course management system is to ensure the best utilization of undergraduate TAs as a resource, but also to store course information in a long-term, digital format and eventually counteract the shortage of CS-educated professionals in industry by improving the scalability and quality of CS education.

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