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Integrating Technical Communication in the Mechanical Engineering Curriculum SETH NORBERG, TIMOTHY ASHCRAFT, BRET VAN POPPEL, U.S. Military Academy — Technical communication is essential to engineering practice, but these skills can be challenging to teach and assess in the classroom. Instructors in the Mechanical Engineering (ME) program at the United States Military Academy are developing new learning exercises to prepare students for success in their capstone design course and beyond. In this paper we highlight the recent successes and lessons learned from two courses: junior-level Thermal-Fluid Systems and the senior-level ME Seminar. Both courses support the newly implemented West Point Writing Program (WPWP), an institutional, writing-across-the-curriculum program. The junior course incorporates four hands-on experiments, which provide an abundance of data for students to analyze, assess, and present. In the senior course the majority of the content that students present is from their ongoing capstone design projects. Between the two courses, students craft essays, lab reports, short summaries, posters, quad charts, and technical presentations. Both courses include peer evaluation, revision exercises, and timed (*on demand*) writing assignments. The junior course includes assignments co-authored by a group as well as an individual report. An overview of both courses' assignments with course-end feedback from the students and the faculty is provided. Strengths and weaknesses are identified and recommendations for instructors seeking to implement similar technical communications assignments in their own courses are presented.

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