

Programming Mathematics as an Advanced Math Course

In this course, mathematical topics such as numerical integration and Taylor polynomials are covered as a bridge for students between calculus and upper level courses. Other topics, such as complex numbers and fractals, expose students to topics they may not see unless they take a specific upper level course. Assignments that have both theoretical questions and programming are created to aid their understanding of the mathematics in addition to giving them basic programming skills in MATLAB. The course design, example assignments, and final projects will be discussed.