In 2015, the MRSEC led the development of an outreach course at Brandeis for Waltham High School students to strengthen our engagement with the WHS community. The course was structured to teach the students biochemistry using 3D molecular models, hands-on activities, CAD, and 3D printing. The class sessions were taught by graduate student and postdoc instructors who received extensive one-on-one curriculum-development mentoring by the Education Director and were encouraged to pursue a hands-on and participative class format.