**Lesson Plans for a nine week robotics course (1/2 semester)**

**Weeks 1 & 2**

Students are assigned partners and robot numbers

Students put robots together to form taskbots.

Students complete the 20 common palette challenges that come with the NXT software. Teacher initials each challenge as it is completed. Grades are awarded based on the amount of time it takes the students to complete all 20.

**Weeks 3 & 4**

Students (working in pairs) complete worksheets 1 – 10 that come with the Robot engineering curriculum from Carnegie Mellon university. The worksheets require some modifications to the original taskbot. Worksheets are graded. A test is given which

covers the material from the worksheets.

**Weeks 5 & 6**

Students complete as many of the Design Challenges has they can from the attached

“Design Challenges” handout. Points are awarded as each challenge is met. Grades are

awarded based on number of total points earned.

**Week 7**

Students complete numbers 21 – 39 of the complete palette portion of the NXT software.

Grades are awarded based on the amount of time it takes the students to complete all 19

of these.

**Weeks 8 & 9**

Students complete three competitive “Lego Projects” from the

attached handout. These projects will be graded based on creativity and time for

completion. This will be the culmination of all they have learned in this unit so

the scores should be a major portion of their grades.