Decision Model – DANCK Solutions DSS

**Definitions**

*i = Course 1, Course 2, Course 3….Course x (last course)*

*p = Period 1, Period 2, Period 3…Period 20*

*s (section)* ***->*** *e: evening, m: morning, t: tuesThurs, f: monWedFri, w: monWed*

*U: Utility.*

**Decision Variables**

Xi = Course enrollment (binary).

**Performance Measures**

Op = Overlap or sum (binary) of enrolled classes during the given period.

Ps = Performance (int) of given section. Number of enrolled courses in the given section.

**Parameters**

Offip = Course (i) offering during the given period (p).

Totsi = Total of a particular course’s (i) weekly offerings for a given section (s).

Gs = Goal (ideal) amount of weekly course hour enrollment for a given section (s).

R = Amount of courses requested.

Ws = Weight (deviation multiplier) for a given section.

**Descriptive Model**

Op = ex. O1 = +

Ps = ex.

**Objective Function**

U