

## COG366 Project Task 5 - Logic Model

For simplicity, I am only including the prioritization process of two tasks, i.e. deciding which task to do before another. This can be used in a more general case as the tie breaker of two tasks.

```
% in general, academic > work > extracurricular activities
```

```
academic(X) and work(Y) -> priority(X)
```

```
academic(X) and eca(Y) -> priority(X)
```

```
work(X) and eca(Y) -> priority(X)
```

```
sameType -> dueSooner?
```

```
% prioritize tasks with sooner due date
```

```
dueSooner(X) OR dueSooner(Y)
```

```
dueSooner(X) -> priority(X)
```

```
sameDate -> takeLonger?
```

```
% prioritize tasks that can take long
```

```
takeLonger(X) OR takeLonger(Y)
```

```
takeLonger(X) -> priority(X)
```

```
% maybe there are some "prefered" tasks that always get prioritized no  
matter what
```

```
% define academic stuff
```

```
homework(X) -> academic(X)
```

```
project(X) -> academic(X)
```

```
% define work stuff
```

```
teachingAssistant(X) -> work(X)
```

```
diningHall(X) -> work(X)
```

```
% define extracurricular activities stuff
```

```
clubMeeting(X) -> eca(X)
```

```
% input
```

```
A = parallel project due 11/2
```

```
B = math homework due 11/3
```

```
project(A).
```

```
homework(B).
```

```
academic(A).
```

```
academic(B).
```

```
sameType -> dueSooner?
```

```
dueSooner(A) -> priority(A)
```

```
Current prioritization: A, B
```

```
% update input
```

A = parallel project due 11/4      % due date change!

not(dueSooner(A)) -> dueSooner(B)

dueSooner(B) -> priority(B)

Current prioritization: B, A