Dijkstra Example

What happens with negative weights?
dijkstra(Graph G, Node start) {
    for each node: x.cost=infinity, x.known=false
    start.cost = 0
    while(not all nodes are known) {
        b = find unknown node with smallest cost
        b.known = true
        for each edge (b,a) in G
            if(!a.known)
                if(b.cost + weight((b,a)) < a.cost){
                    a.cost = b.cost + weight((b,a))
                    a.path = b
                }
    }
}
A is already known, and its cost is less.
B is already known, the algorithm won’t reduce it. And C is already known.