

## **Hackpack Guidelines**

***Deadline for Electronic Submission: April 30, 7:00 AM (via WebCourses)***

***Deadline for Hardcopy Submission: April 30, 7:00 AM (at final contest)***

### **Required elements**

|                            |                                |
|----------------------------|--------------------------------|
| Permutation Generation     | Network Flow                   |
| Combination Generation     | Matrix Chain Multiplication DP |
| GCD                        | Longest Common Subsequence DP  |
| LCM                        | Knapsack DP                    |
| Dijkstra's Algorithm       | Line-Line Intersection         |
| Floyd-Warshall's Algorithm | Line-Plane Intersection        |
| Topological Sort           | Polygon Area                   |
| Bellman Ford's Algorithm   | Convex Hull                    |
| Kruskal's Algorithm        | Point in Polygon               |

### **Grading Criteria**

This will not be specifically divulged, but here are the elements I will look for in the hackpack:

Good programming contest style (readable but not overly verbose code)

Written generally (written in such a way that methods are adaptable to a large variety of problems statements)

Correctness (I may have difficulty judging this but if you provide sample tests, those may help me verify correctness)

Amount of Material (I expect to see all of the required elements and some other items that you've figured out are useful in contests in general)

***If you use excellent style and implement all the items listed above, your team will earn at least 80% on this assignment. The last 20% is designated for the extra material.***

### **Relationship to Final Team Contest**

Your only aids for the final team contest will be one copy of your team's hackpack. Please bring two hard copies of your team's hackpack to Final Team Contest. I will collect one of these copies before the contest begins. You'll have the other copy to use during the contest. You may have no other notes (so none of my lecture notes, etc.) I only want code in the hackpack. What you give me in person must correspond exactly to what you turn in electronically, otherwise an automatic 20% will be deducted.

### **Academic Misconduct**

All of this code is readily available in many places, as are solutions to most of the problems we've used. If I find structural similarity between your team's hackpack code and posted code online, I'll go through the steps of formally giving your team an F in the course and registering that information with UCF. I've never done this before, but in an elective class like this, I feel that this rule is necessary to ensure the spirit of a fair final contest. If your team submitted code during one of the prior team contests that was plagiarized, either during the contest or after the contest, please admit this to me before the final team contest to avoid this penalty. If this has occurred, I'll make the maximum grade you can earn in the class a B, since I was very clear on the class syllabus that in an elective class like this, I was going to be harsh with academic misconduct.