**MGMT 3020 – Operations Management**

**Class Example on Chapter 17: Project Management**

1. **Colonial State College** is considering building a new athletic complex on campus. The complex would provide a new gymnasium for intercollegiate basketball games, expanded office space, classrooms, and intramural facilities. The activities that would have to be completed before beginning construction are listed next.

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| --- | --- | --- | --- |
| **Activity** | **Description** | **Immediate Predecessors** | **Time (weeks)** |
| A | Survey building site | ------ | 6 |
| B | Develop initial design | ------ | 8 |
| C | Obtain board approval | A,B | 12 |
| D | Select architect | C | 4 |
| E | Establish budget | C | 6 |
| F | Finalize design | D,E | 15 |
| G | Obtain financing | E | 12 |
| H | Hire contractor | F,G | 8 |

1. Develop a network for this project using the AON method.
2. Analyze the project network to determine the ET, EF, LS, and LF for each activity.
3. Identify the activities; hence the critical path(s).
4. Does it appear reasonable that construction could begin 1 year after the decision to begin the project? What is the project-completion time?
5. On which activities can you be least worried about tardiness to start or complete? If resources are transferable between activities, from which activities will you transfer resources? To which?