



## **ASC 2017 – Project Management** **Instructions and Timeline**

### **Introduction – 2/9/17**

Your team will act as members of DPR Construction; determining if you will take the deal set forth by your client. You are empowered to make key contractual, business and logistical decisions. The decisions your team makes will have significant consequences and will impact the success of your project. The strategy that you choose will map the road ahead, but may also expose you to possible roadblocks. You are expected to adapt to situations, engineer solutions, demonstrate DPR's Core Values, and deliver a project decision while maintaining raving fans.

DPR is responding to a Request for Proposal for the Gattaca Project. DPR is still determining if the project is one in which we want to pursue. Your selection on whether or not to take the project is based upon your team decision about the client's contract, schedule and budget requirements; while maintaining a great relationship.

Gattaca (located in California) has been a great client of DPR in the past. We have built several projects for them over the past few decades and would like to continue the relationship as long as the deal is fair, equitable, and profitable.

Gattaca believes in delivering bioengineering projects that impact the world while ensuring a sense of community connectivity. Gattaca and DPR have transformed the world through design, construction, and through science on several past endeavors. Gattaca is looking to expand as a company and in doing so they are asking DPR to help with construction of the new Gattaca facility. Gattaca is a state of the art bioengineering leader for the chemical industry. It is a building that will last for 100 years and will be a marque milestone in the progression of chemistry to create sustainable products.

### **List of Project Modules:**

The final team score will be a composite of the following:

20 Points	Contract Risk Assessment Module
20 Points	Logistics + Schedule Modules
20 Points	MEP Equipment Module
20 Points	General Conditions (GC's) and Schedule of Values (SOV) Module
20 Points	All Scenarios + Red-Zone "Go/No-Go" + Mini Presentation
30 Points	Final Presentation
<i>130 Points</i>	<i>Total Points</i>



## **Schedule:**

### **THURSDAY, 2/9/17**

<b>Time</b>	<b>Activity</b>	<b>Activity is DUE</b>
6:00 AM	Initial Presentation at Fremont Room.	
7:00 AM	Students Receive INITIAL PROJECT INFORMATION.	
10:00 AM	<u>GC's and SOV Module Explanation</u> – Only <b>(2)</b> Students per Team come down to Fremont Room for GC's and SOV Module Presentation. Students should bring questions about GC's and SOV module and DPR execs can answer.	
2:00 PM – 4:00 PM	<u>Mini-Presentations</u> - Information for this activity will be provided to you through email sometime during the day.	
3:00 PM		<u>Contract Risk Assessment</u> Module is DUE.
5:00 PM	<u>Logistics Module</u> - Only <b>(2)</b> Students per Team come down to Fremont Room for Logistics Module Presentation. This will be a new module which students did not receive at 7 AM.	
8:00 PM		1. <u>GC Module</u> is DUE. 2. <u>SOV Module</u> is DUE. 3. <u>Schedule Module</u> is DUE. 4. <u>MEP Equipment Module</u> is DUE.
10:00 PM		1. <u>Logistics Module</u> is DUE 2. <u>Red Zone "Go/No-Go"</u> is DUE.

### **FRIDAY, 2/10/17**

7:00 AM	Presentation Times will be posted at Fremont Room.	All Presentation Materials are DUE to Fremont Room.
8:00 AM – 4:00 PM	Team Presentations at Fremont Room	
5:00 PM	Problem Recap at Fremont Room	
6:00 PM – 7:00 PM	Student Info Session – Hang out and talk to DPR at Fremont Room.	



## **1. Contract Risk Assessment Module**

During this module, your team will evaluate the (2) contract documents provided. Use the Risk Assessment Form as a tool to dive deep into each contract and learn the positives and negatives of each. Then Fill out the Contract Comparison document to finalize your analysis and help lead you toward your contract selection. You can find detailed instructions in the module section of your binder and usb.

### **Turn In:**

Your Team will turn in the following items for this module by email.

- **(2) Completed Risk Assessment Forms**
- **(1) Contract Comparison Document**

## **2. Logistics Module**

It is crucial that all parties who are traveling through and nearby a construction project clearly understand how to travel safely. If this information is unclear, this could put people at risk of injury or worse.

During this module, your team will create logistics plans based on certain requests by your potential owner. You should be detailed and provide a clean, aesthetic final product. This is for your owner so make sure it looks great!

This module is NOT provided in your initial package. This module will be provided to you later in the day as per the schedule on page 2 of this document.

### **Turn In:**

This information will be explained to you when you receive the module.

## **3. Schedule Module**

Project schedules are like the backbone of a project. They explain how a project will flow and detail the sequence of the work. A schedule is also used to help the construction management team prioritize their management activities. By understanding when activities are taking place, and what activities are predecessors and successors, a manager can prioritize his workload to make sure the field team receives the information they need before the work starts.

During this module, your team will create a Line Item schedule in Smartsheet. Your team has been provided milestones and activities. Use what is given to you but also add additional milestones and



activities to create the complete schedule. You can find detailed instructions in the module section of your binder and usb.

**Turn In:**

Your Team will turn in the following items for this module by email.

- **(1) Smartsheet schedule as a pdf document.**
- **(1) Questionnaire filled out**

#### **4. MEP Equipment Module**

As a construction manager, we need to understand what the design is and if we think it works. When we receive design documents, it is our job to review and validate the design before the work starts. We do constructability reviews to help guide our owners and designers to create understandable and achievable construction documents.

During this module, your team will confirm if the design documents accurately depict the required MEP systems which are required for each piece of equipment. The equipment schedule will tell you what each piece of equipment needs.

*For example: An equipment schedule states that a gas range (oven and stove) requires 120V power at 15-Amps, a 3/4" gas line, and a ventilation system. But what if the drawings showed 120V power, but didn't show a gas line or a ventilation system? It is in a construction manager's best interest to catch these discrepancies before schedule and costs are impacted.*

**Turn In:**

Your Team will turn in the following items for this module by email.

- **(1) MEP Equipment Constructability Review**

#### **5. General Conditions (GC's)**

General Conditions are the costs to manage the project. This includes but is not limited to management staffing labor, field offices, equipment, safety, internet, vehicles, food/water, power, printers, etc. It is important for project managers to compile the costs for these items before a project starts so that you can get them into your budget. Imagine if your owner approved your costs for the job but you forgot to include a superintendent, or you forgot internet! Then your fee would have to cover those items!



In this module you will create your GC's for the project. Think hard about what you will need or don't need! You need to make sure you have everything you project requires and nothing more. You don't want to forget anything, but you also don't want to be the person who prices yourself out of a job!

#### **Turn In:**

Your Team will turn in the following items for this module by email.

- **(1) GC document in both pdf and excel formats.**

### **6. Schedule of Values (SOV) Module**

Schedule of Values is where you will buy out your subcontractors. Be smart about who you choose. You want to make sure the subcontractors have included everything that will be required of that scope at a reasonable and competitive price. It is DPR's job to scrutinize the scope and the pricing of all our subcontractors. DPR does not want to take on any risk that the subcontractor should have within their subcontract.

In this module you will review each sub bid and select (1) subcontract per scope of work. Fill in the subcontractor values and add any comments that you think your DPR executive should know about your selected subcontractor.

Then fill out your Insurance/Bond %, Fee, Design and Construction Contingency to finalize your total project cost.

#### **Turn In:**

Your Team will turn in the following items for this module by email.

- **(1) SOV document in both pdf and excel formats.**
- **(1) DPR Subcontractor Bid Evaluation Sheet in both pdf and excel formats.**

### **7. All Scenarios**

The construction industry is a fast-paced and exciting industry. Generally we construction managers are juggling many items at the same time. During the day your team will be sent emails with instructions for deliverables which will be due the same day. Make sure you respond to these emails in a professional and clear way. Your DPR executives expect you to perform at a high level and provide timely responses!





## **8. Red-Zone “Go/No-Go”**

Ah, the most exciting question of the day. After you have built the many modules of the day, you have a great understanding of the risks that the project creates. So should DPR take the job or not? Read through the instructions in detail to provide a detailed response for this answer.

### **Turn In:**

- **(1) Response to the RedZone “Go/No-Go” email.**

## **9. Mini Presentation**

Sometimes email or phone communications are restrictive. It is hard to ask questions back-and-forth in a timely manner over email and phone calls don't allow you to read people's body language. Even face-time can't beat a face-to-face meeting. Sometime during the day we will ask members of your team to come down to Fremont room and present to your DPR executives. The content that you will present will be explained to you sometime during the day.

## **10. Final Presentation**

The presentation will be structured as an internal DPR meeting held to discuss the risks of the project. Every member of your team must present. Teams will present their final risk assessments, budget and schedule for the project with a brief recap of how they arrived at those results. The presentation should cover your overall strategy including how the team was structured to accomplish the decision on whether or not to pursue this project. This meeting will also be a forum to present and review risk allowing us an opportunity to share how we might improve for future projects.

### **Typical Presentation Outline:**

- Setup - 3 minutes
- Team Presentation - 20 minutes
- Question and Answer - 10 minutes
- Breakdown - 2 minute

**7:00 am:** All presentation materials are due. Any handouts or electronic files produced after this time cannot be utilized during the presentation. Please also return all specifications, drawings and USB Modems at this time.

**7:00 am:** Presentation times will be posted.

**8:00 am – 4:00 pm:** Team Presentations



## **11. Problem Requirements**

Information can be directed to your team in numerous ways. Any information from your team to the problem sponsor's team should be transmitted via email.

Physical copies will only be provided for a limited number of the project documents, and if the internet isn't working. All documents will be provided in electronic format. The email accounts provided by your team must be utilized to submit all questions and responses. Therefore your team must have an internet connection during the course of the problem.

### **Email Address**

During the course of the competition you will be communicating with the sponsor's team through this email address:

DPR Executive Team      [ASCdpr@gmail.com](mailto:ASCdpr@gmail.com)

### **Problem Material**

Upon completion of the Initial Presentation your team will be provided with the following materials:

- Project Turnover Binder
- Room Signs
- DPR Survival Kit

### **Project Information**

A real project was utilized to create this problem; however the problem's components are fictitious. The architect, client, and all parties associated to the project have generously granted us permission to utilize the project for the benefit of this educational experience. We insist that their generosity not be taken for granted. Under no circumstances should your team make contact with the client, architect or any representatives of the project. Please refrain from using the internet as a guideline to complete the problem, this will not provide the educational experience in which the problem is intended to produce.

During the course of the problem if any instructional questions arise please address them to Taylor Banks.