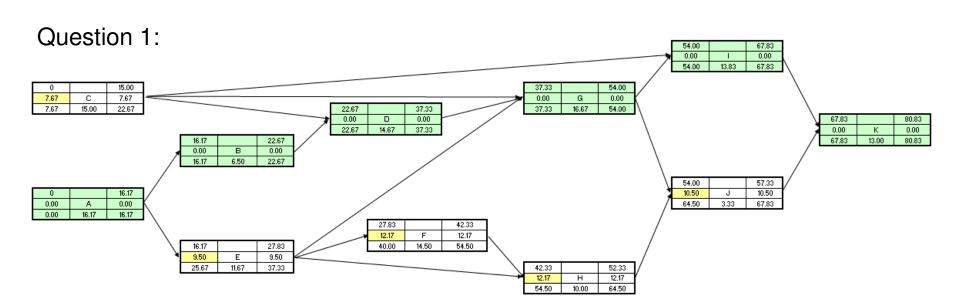


CEE 9510 Assignment 2 Answer Key



The critical path is shown in green. The slack available for each activity is shown in Yellow. Note the absence of slack on the critical path.

Activity	Preceding	Best	Likely	Worst	Time est.
Hotterty	activity	5	Likely	***	(TE)
a	0	12	15	25	16.17
ь	a	4	6	11	6.50
С	0	12	12	30	15.00
d	b,c	8	15	20	14.67
е	a	7	12	15	11.67
f	e	9	9	42	14.50
g	c,d,e	13	17	19	16.67
h	e,f	5	10	15	10.00
i	c,g	11	13	20	13.83
i	g,h	2	3	6	3.33
k	j,i	8	12	22	13.00

ES		EF
Slack	Activity	Slack check
LS	Time Est	LF



Question 2:

Brainstorm with construction team how to build straw plumbing, electrical

features etc!

Planned 12 hours

785 hours 2.3.0 2.1.0 **Cost Management Activities** Configuration Planning: Scope Management Activities Time Management Activities Procurement: Purchase Prepare Construction Drawings Materials Planned 56 hours Planned 135 hours Planned 64 hours Planned 28 hours Planned 52 hours 2.4.1 Generate Shop drawings for Scope Verification at completion of Earned Value Analysis bi monthly Site visit local farms Scheduling Purchased Plumbing, HVAC, each project phase. Electrical, Systems, Architectural sustems...of straw! Planned 12 hour Planned 20 hours Planned 12 hours Planned 16 hours 2.3.3 Configuration review meetings with Management of integrated changes Network Diagramming for critical path Deal with Approved return of goods, Purchase vs grow study Insurance company consortium INCO terms, late shipments, earned value contingency plans Planned 40 hours Planned 8 hour Planned 8 hours Planned: 20 hours Planned 24 hours 2.2.3 Meet with actors user group to ensure Integrated Change Management review Resource Levelling and Crashing Arrange summer tunnel time with UWO Samples evaluation and pricing reasonable design being implemented meetings contingency. Need to keep finishing negotiations tades and building trades off the small Planned 8 hours site at the same time. Planned 8 hours Planned 12 hours Planned 8 hour Planned 8 hours Provide all out sheets Mock ups fabrication and review Co-ordinate project completion with actors guild - No place to store house! Planned 10 hours It must blow away immediately or costs Planned 8 hours incur! Complete As built drawings Final Purchasing activities including selecting vendors, setting up suppliers in system and issuing PO Planned 10 hours Planned 8 hours Complete resubmits and enginereing changes Planned 12 hours

Straw House Work Breakdown Structure

> Every student in the class should have a different but similar answer as shown here. In particular design considerations for more robust building practices based upon the 3LP project should be evident to ensure full marks...particularly in a brick house design. 3 full WBSs required.

2.5.0 Other Project Management Core Disciplines	2.6.0 Execution Activities	2.7.0 Closure Activities	2.8.0 Monitoring and Controlling Activities		
Planned 46 hours	Planned 300 hours	Planned 44 hours	Planned 70 hours		
2.5.1 Risk - Expected Monetary Value Studies for timing of straw purchases and different vendor opportunities	2.6.1 Build straw floors by mixing matted straw with resin	2.7.1 Lessons Learned Planned: 16 hours	2.8.2 Quality Control to control plan		
Planned 8 hours	Planned 50 hours		Planned 10 hours		
2.5.2 Provide sensitivity training to staff who will be working with pigs and actors	2.6.2 Weave Straw Walls	2.7.2 Contractual Closure Planned: 8 hours	2.8.3 Generate checklists and organize Major mechanical and electrical straw equipment commissioning		
Planned: 8 hours	Planned 50 hours		Planned: 20 hours		
2.5.3 Training construction staff for working with straw, the necessary storage methods, the drying methods, the	2.6.3 Braid Straw Beams	2.7.3 Line by Line Specification review for compliance and punch list	2.8.4 Redistribute staff to next postings Planned: 20 hours		
coloring methods	Planned 30 hours	Planned 20 hours			
2.5.4 Quality planning and assurance Planned: 15 hours	2.6.5 Mud external areas for rigidity and lash sections with hemp rope		2.8.5 Protect Wind tunnel from material projectiles		
	Planned 60 hours		Planned: 20 hours		
	2.6.6 Bale straw for compression loading areas such as stairs Planned 30 hours	By the Constructio Project Manager	rhead staff assigned to the team n workers on the team Technical Planning workers on team		
	2.6.7 fine trades work for architectural features such as windows, porch etc.	A separate sheet e Click on asterix to g	xists for the next level. go to the next level		
	Planned 20 hours	Straw Ho	use example sh		
	2.6.8 Final subsection assemblies including finishing touches such as affixing wind sock, weather vane, and flag	Wood and	d Brick to be sim		
	Planned 50 hours				

2.6.9 Install straw systems and final Paint

Planned 10 hours

own here. nilar.

Task	Change Notice	Print Reference	Product line	Print Reference	Product Lines	Planned Hours	Actual Hours
2.2.2.1	1	straw-E-001	straw light fixtures	0008-0005	Pigs 35	15	
2.2.2.2	2	straw-M-001			Pigs 98	15	
2.2.2.3	3	straw-A-001	porch w Muskoka chair	0007-0006	Pigschair	10	
2.2.2.4	4						
2.2.2.5	5						
2.2.2.6	6						
2.2.2.7	7						
2.2.2.8	8						
2.2.2.9	9						
2.2.2.10	10						
2.2.2.11	11						
2.2.2.12	12						
2.2.2.13	13						
2.2.2.14	14						
2.2.2.15	15						
2.2.2.16	16						
2.2.2.17	17						
2.2.2.18	18						
2.2.2.19	19						
2.2.2.20	20						
2.2.2.21	21						
2.2.2.22	22						
2.2.2.23	23						
2.2.2.24							
Total						40	0

Task	Area	Location	Style	Print Reference	Product	Planned Hours	Actual Hours
2.6.2.1	kitchen	north	celtic	0008-0007	dream weaver	20	
2.6.2.2	exterior	north east	laminated	0008-0006	heavy set	20	
2.6.2.3	kitchen	east	celtic	0008-0006	dream weaver	10	
2.6.2.4							
2.6.2.5							
2.6.2.6							
2.6.2.7							
2.6.2.8							
2.6.2.9							
2.6.2.10							
2.6.2.11							
2.6.2.12							
2.6.2.13							
2.6.2.14							
2.6.2.15							
2.6.2.16							
2.6.2.17							
2.6.2.18							
2.6.2.19							
2.6.2.20							
2.6.2.21							
2.6.2.22							
2.6.2.23							
2.6.2.24							
total						50	0

WGH WBS sheet

Task	Location	% of labor to apply	Hours Planned	Hours Actual
2.6.1.1	hall 1	0.17	10	
2.6.1.2	hall 2	0.17	10	
2.6.1.3	kitchen	0.08	10	
2.6.1.4	living room	0.03	10	
2.6.1.5	bathroom	0.03	10	
2.6.1.6				
2.6.1.7				
2.6.1.8				
2.6.1.9				
2.6.1.10				
Grand Total			50	0

	_				-			
TL	Construction			M		t Staff	Eng an	
Task	Planned Hours	Actual Hours	Planned Hours	Actual Hours	Planned Hours	Actual Hours	Planned Hours	Actual Hours
1.0.0 Straw House vork breakdovn structure								
2.0.0 Configuration Planning								
2.0.1 Generate Shop Drawings							53	
2.0.2 configuration Meetings			20					
2.0.3 User Group Meetings			8					
2.0.4 Cut Sheets							10	
2.0.5 Complete As Built Drawings							10	
2.0.6 Complete Resubmittals and Engineering Changes (SDC)							12	
2.07 Brainstorm technical co-ordination solutions							12	
2.1.0 Procurement								
2.1.1 Site vist farms					20			
2.1.2 Purchase vs grow studies			8		20			
2.1.3 Sample Evaluations and Pricing			Ů		8			
2.1.4 Mock Ups					Ů		8	
2.1.5 Final Purchasing Activities					8		Ů	
E. TOT HOLD GEORGE CONTROL					Ť			
2.2.0 Scope								
a.c. a a a a a a								
2.2.1 Scope Verification			12					
2.2.2 Manage Integrated Changes			40					
2.2.3 Integrated Change Management Review Meetings					12			
2.3.0 Cost								
2.3.1 Earned Value Analysis			16					
2.3.2 Returned Goods Authorizations					24			
2.3.3 Book Summer Tunnel Time			8					
2.3.4 Co-ordinate with Actors Guild to ensure no out of season costs			8					
2.4.0 Time								
below times								
2.4.1 Scheduling			12					
2.4.2 Network Diagramming			8					
2.4.3 Resource Levelling and Crashing (if necessary)			8					

ॐree Little Pigs Marketing Project								
	Constr	Construction		PM		rt Staff	Eng and Tech	
Task	Planned	Actual	Planned	Actual	Planned	Actual	Planned	Actual
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours
2.5.0 Other PM Disciplines								
2.5.1 Expected Monetary Value Study			8					
2.5.2 Sensitivity training			·		8			
2.5.3 Straw Materials training	15				·			
2.5.4 Quality Planning and Assurance					15			
2.6.0 Execution								
2.6.1 Build Straw Floors	50							
2.6.2 Weave Straw Walls	50							
2.6.3 Braid Straw Beams	30							
2.6.4 Mud External Areas	60							
2.6.5 Bale Straw for compression areas	30							
2.6.6 Fine Trades work	20							
2.6.7 Final Assemblies	50							
2.6.8 Install systems and paint structure	10							
2.0.0 Install systems and paint structure	10							
2.7.0 Closure								
2.7.1Lessons Learned			16					
2.7.2 Contractural closure					8			
2.7.3 Line by Line spec review			20					
2.8.0 Controlling and Monitoring								
2.0.0 Controlling and 1-louisoning								
2.8.1 Quality Control					10			
2.8.2 Commissioning Checklists	20							
2.8.3 Redistribute Staff			20					
2.8.4 Protect Wind Tunnel	20							
Total hours Planned and Actual	355	0	212	0	113		105	0
Deviation by Department								
Total Deviation	0							
Original Est Hours	785							