



COLORADO STATE UNIVERSITY  
— GLOBAL —

## PJM530 – CONTRACTS, PROCUREMENT, AND RISK MANAGEMENT

### **Credit Hours:** 3

**Contact Hours:** This is a 3-credit course, offered in accelerated format. This means that 16 weeks of material is covered in 8 weeks. The exact number of hours per week that you can expect to spend on each course will vary based upon the weekly coursework, as well as your study style and preferences. You should plan to spend 14-20 hours per week in each course reading material, interacting on the discussion boards, writing papers, completing projects, and doing research.

**Faculty Information:** Faculty contact information and office hours can be found on the faculty profile page.

**PMI-GAC Accreditation and PMP Certification:** PJM programs are GAC accredited. Among other requirements, Project Management Institute (PMI) requires those who aspire to take the PMP exam to have a minimum of 35 contact hours of documented training in the area of project management. Students can utilize PJM courses taken at CSU Global to satisfy this requirement. Please also note that CSU Global's Bachelor of Science in Project Management and Master of Project Management are accredited by Project Management Institute Global Accreditation Center for Project Management Education Programs (GAC). GAC accreditation ensures the quality of academic degree programs and their graduates to meet the standards of the rapidly growing field of project management.

---

## COURSE DESCRIPTION AND OUTCOMES

---

### **COURSE DESCRIPTION:**

This course provides students with an in-depth understanding of the procurement- and risk-management processes in projects. The course also helps students evaluate and synthesize concepts within the domains of contract management and risk management, and helps students identify and assess recommended practices in contract management and purchasing. Topics primarily include risk-management planning, risk identification, risk analysis, risk-response strategies, risk monitoring, and risk control. In addition, the course covers the project manager's responsibilities in identifying and obtaining resources from vendors, as well as the legal requirements and contracting processes involved. Prerequisite: PJM500

### **COURSE OVERVIEW:**

In this advanced graduate-level course, students will apply the best practices of contract management and purchasing within a project-management, case-based course. Often the job of identifying and obtaining resources from vendors is a task that requires project manager oversight. The legal requirements and contracting processes must be discerned through due diligence on the part of the project manager. Additionally, this course focuses on the processes associated with identifying and minimizing risks. Topic areas include risk-management planning, risk identification, risk analysis, responses to risk, and risk monitoring.

### **COURSE LEARNING OUTCOMES:**

1. Learn effective project-procurement management and synthesize efficient processes to purchase products or services needed.
2. Analyze and incorporate methods used to plan for the procurement of resources within a project's scope.

3. Discuss the legal aspects of contracts and procurements.
4. Explain and apply the process used in source selection and contract awarding.
5. Explore and research practices and procedures associated with international contracts and contract law.
6. Define risk and evaluate approaches to risk planning, identification, treatment, monitoring, and control.
7. Understand qualitative and quantitative risk analysis and its role in project management.

---

## **PARTICIPATION & ATTENDANCE**

---

Prompt and consistent attendance in your online courses is essential for your success at CSU Global Campus. Failure to verify your attendance within the first 7 days of this course may result in your withdrawal. If for some reason you would like to drop a course, please contact your advisor.

Online classes have deadlines, assignments, and participation requirements just like on-campus classes. Budget your time carefully and keep an open line of communication with your instructor. If you are having technical problems, problems with your assignments, or other problems that are impeding your progress, let your instructor know as soon as possible.

---

## **COURSE MATERIALS**

---

### **Required:**

- Wilson, R. (2015). *Mastering risk and procurement in project management: A guide to planning, controlling, and resolving unexpected problems* (1st ed.). Upper Saddle River, NJ: Pearson. ISBN-13: 9780133837902
- Project Management Institute. (2017). *A guide to the project management body of knowledge (PMBOK Guide®)* (6th ed.). Newtown Square, PA: Project Management. ISBN-13: 9781628251845. (In CSU Global Library as an ebook:  
<http://search.ebscohost.com.csuglobal.idm.oclc.org/login.aspx?direct=true&db=nlebk&AN=1595321&site=ehost-live>)

### **Suggested:**

#### **PMI-GAC Accreditation and PMP Certification**

Among other requirements, Project Management Institute (PMI) requires those who aspire to take the PMP exam to have a minimum of 35 contact hours of documented training in the area of project management. Other PMI certificates have a similar requirement too. Students may utilize PJM courses taken at CSU Global to satisfy these requirements. Please also note that CSU Global's Bachelor of Science in Project Management and Master of Project Management are accredited by Project Management Institute Global Accreditation Center for Project Management Education Programs (GAC). GAC accreditation ensures the quality of academic degree programs and their graduates to meet the standards of the rapidly growing field of project management.

#### **PJM Careers**

CSU Global is focused on providing career-relevant project management degree programs that align with industry requirements and best practices. CSU Global's project management degree programs are designed to provide students with the business and project management skills necessary to succeed in an increasingly global economy and changing business environment. The program focuses on technology facilitated collaboration, innovation and entrepreneurship, systems thinking, ethical and socially responsible leadership, and the globalization of today's market. Faculty members serve as peer cohort mentors and

facilitators, career coaches, writing coaches, and résumé reviewers for students, and represent the university at various academic and professional conferences and events. Students who need additional academic support to answer questions about degree programs may request to speak with the Program Chair or can schedule a meeting with a faculty career coach via an online scheduling tool located in the student portal. The career center allows students the opportunity to talk to a career coach, search for jobs and have access to a variety of resources.

A variety of job opportunities exist in various fields of practice in project management and to maintain high standards of practice in this industry, project management practitioners need to pay adequate attention to education and training to ensure they obtain the skills they need to succeed. Obtaining well-known industry certificates is one of the ways that project management practitioners can choose to improve their skills, set themselves apart from competitors, and showcase their credentials. Here are some of the example certificates that project management practitioners may choose to pursue:

- Certificates offered by Project Management Institute (PMI): PMI Professional in Business Analysis (PMI-PBA)<sup>®</sup>, Certified Associate in Project Management (CAPM) and Project Management Professional (PMP).
- Certificates offered by the International Institute of Business Analysis<sup>™</sup> (IIBA<sup>®</sup>) such as ECBA (Entry Certificate in Business Analysis<sup>™</sup>), CCBA (Certificate of Capability in Business Analysis<sup>™</sup>), and CBAP (Certified Business Analysis Professional<sup>™</sup>)
- Certificates offered by the American Association of Cost Engineering (AACE International): Certified Cost Technician (CCT), Certified Scheduling Technician (CST), Certified Cost Professional (CCP), Certified Estimating Professional (CEP), and Planning & Scheduling Professional (PSP)
- Other example certificates include the Certified ScrumMaster (CSM) from Scrum Alliance, the PRINCE2 certificates, CompTIA's Project+ certificate, and construction project management certificates such as Construction the Certified Construction Manager (CCM) by Management Association of America (CMAA).

### **Project Management Institute (PMI)<sup>®</sup> Student Membership**

In keeping with its commitment to the academic and professional success of its students, CSU Global encourages students enrolled in its Project Management programs to consider becoming members of the Project Management Institute (PMI)<sup>®</sup>.

Advantages of PMI membership include continuous online access to the PMBOK<sup>®</sup> Guide, a variety of tools and templates, and many knowledge resources, including on-demand webinars and an online library of articles and books (PMI, 2018). Membership also conveys access to a number of professional communities and volunteer opportunities as well as access to career resources and professional development opportunities. (PMI, 2018). Additional information including membership application can be found on the PMI website:

<https://www.pmi.org/>

PMI<sup>®</sup>, PMBOK<sup>®</sup> Guide, Project Management Professional<sup>®</sup>, and PMP<sup>®</sup> are registered marks of the Project Management Institute, Inc.

Reference: PMI, (2018). Student Membership. Project Management Institute, Inc.

<https://www.pmi.org/membership/student>

### **Ethics and Professional Conduct**

CSU global is committed to preparing its graduates to approach every situation ethically and professionally. Students are encouraged to reflect upon course topics that focus on ethical and professional conduct issues in business. Students in the Project Management programs of study are encouraged to use the Code of Ethics and Professional Conduct published by the Project Management Institute (PMI)<sup>®</sup>. PMI codifies ethical

principles for professionals in the field of project management which serve as the foundational principles for students in this program.

Reference: Project Management Institute. (n.d.) Code of Ethics and Professional Conduct. Newtown Square, Pa: Project Management Institute. Retrieved from <https://www.pmi.org/about/ethics/code>

#### References

Project Management Institute. (n.d.). *Code of ethics and professional conduct*. Newtown Square, PA: Project Management Institute.

**NOTE:** All non-textbook required readings and materials necessary to complete assignments, discussions, and/or supplemental or required exercises are provided within the course itself. Please read through each course module carefully.

---

## COURSE SCHEDULE

---

### Due Dates

The Academic Week at CSU Global begins on Monday and ends the following Sunday.

- **Discussion Boards:** The original post must be completed by Thursday at 11:59 p.m. MT and peer responses posted by Sunday 11:59 p.m. MT. Late posts may not be awarded points.
- **Critical Thinking and Portfolio Milestones:** Assignments are due Sunday at 11:59 p.m. MT.

---

## WEEKLY READING AND ASSIGNMENT DETAILS

---

### MODULE 1

#### Readings

- Chapter 4 in *Mastering Risk and Procurement*
- Part I, Chapters 12 & 13 in *PMBOK® Guide*
- Part II, Sections 2.2, 3.23, & 3.24 in *PMBOK® Guide*

#### Discussion (25 points)

#### Critical Thinking (100 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

#### **Option #1: Make or Buy**

The PMP Certification Exam may include Make or Buy Analysis questions. Although it's not the only reason for learning this material, this assignment helps prepare you for that type of question on the exam. The assignment is relevant whether you plan to take the PMP exam, have already passed the exam, or have no plans to take the exam.

The calculation part of the question requires only addition and multiplication. Start by reading the scenario and then answer the questions below.

#### **Scenario:**

You are the project manager on Project VIM, which is building a new printer, scanner, copier, and fax machine from various component parts. One of the component parts for the VIM product is currently

available from a supplier for \$115,000 for the 5,000 units you need. You took over for a prior project manager who only allocated \$90,000 for this component. This means that you will exceed your project budget if you purchase the VIM component units from this supplier.

You reach out to your in-house manufacturing group and find that you can produce these 5,000 units in-house, within a time frame that fits the project timeline. The manufacturing group indicates that there is a one-time charge of \$3,000 for setting up the production line. The material and labor cost will be \$12 per unit if the firm manufactures the product in-house. You also learn that since this is a new set-up (which is using old equipment), the in-house manufacturing team estimates the following defects percentages, as well as the probability of those defects occurring:

Defect %	0	25	35	40
Probability of occurrence (%)	10	60	20	10

The replacement cost for defective components made in-house is \$30 per defective unit.

**Calculate the following (using the Excel Template linked below):**

1. Total material costs
2. Expected number of defective units at each defect percentage (%)
3. Cost of replacing defective units at each defect percentage (%)
4. Material costs plus cost of replacing defective units at each defect percentage (%)
5. The probability of cost for the defect percentage (%) levels
6. Expected value of “making” components in-house

**Address the following in a written essay:**

- Using the expected value, present your recommendation to make or buy the Project VIM component parts.
- Will you need to issue a change request for additional money on your project? If so, for how much; and, if not, why not? What reasons do you think management might use to opt for the less economical choice?

**Submission:**

- For the calculation section, complete the attached Excel template or a similar one. Post your answers in the Excel file.
- For the written essay section, submit a paper that is 2-3 pages long. Include a minimum of two scholarly references, in addition to any course textbooks or lecture material you decide to use. The CSU Global Library is a good place to find these sources. Format your entire paper according to the CSU Global Guide to Writing & APA. You will also find an APA template for writing a paper on the Library site.

**Option #2: Lease or Buy**

The PMP Certification Exam may include Lease or Buy Analysis questions. Although it’s not the only reason for learning this material, this assignment helps prepare you for that type of question on the exam. The assignment is relevant whether you plan to take the PMP exam, have already passed the exam, or have no plans to take the exam.

This assignment requires both calculations (using only addition and multiplication) and written answers. Start by reading the scenario, and then answer the questions and perform the calculations below.

**Scenario:**

You are the project manager of a campaign rally that your non-profit holds each year to promote the adoption of greyhounds. You will require the use of a large tent for the week of the rally. You must determine if you should lease or buy a tent, and, if leasing, for how long.

- Scenario 1 – The cost of the tent is \$1,580.
- Scenario 2 – You can lease the tent for seven days, with a set-up and return charge of \$700 and daily fee of \$125.
- Scenario 3 – You can lease the tent for 10 days, with a set-up fee of \$375 and a daily fee of \$125; however, you will have to hire individuals to take down the tent and return it for a charge of \$195. If you choose this option, the daily fee is discounted by 20%.

**Answer the following questions:**

1. What is the economical choice and why? Show this in your calculations as well.
2. What do you recommend to the sponsor of your project and why?
3. Thinking strategically, what reasons might management use to opt for the less economical choice?
4. Include your calculations in an appendix, which comes after the references page.

**Submission:**

- Prepare a 3- to 4-page paper (not including the required title and references pages and the appendix showing calculations) explaining lease-buy analysis in terms of project risk.
- Support your paper with a minimum of two current (no older than five years) scholarly sources from the CSU Global Library, in addition to any course textbooks or lecture material you decide to use.

Format your entire paper according to the CSU Global Guide to Writing & APA. You will also find an APA template for writing a paper on the Library site.

## MODULE 2

### Readings

- Chapters 6 in *Mastering Risk and Procurement*
- Part I, Section 11.5 in *PMBOK® Guide*
- Part II, Sections 3.23, 3.24, 4.9, & 5.11 in *PMBOK® Guide*

### Discussion (25 points)

#### Portfolio Milestone (25 points)

This week, choose the milestone option that corresponds to the option of Portfolio Project you will complete. (Review those options in the Week 8 folder.) Do not do both assignments. Identify your assignment choice in the title of your submission.

#### **Option #1: The Recovery Plan Project Case**

- Read the Recovery Plan Project case (linked in Portfolio Project Option 1 in the Module 8 folder). Examine the project management issues detailed in the case, including those concerning procurement, contracts, and risk management.
- Write an overview of one-half to one page (not including the required title and references pages) of the case and the project management issues to be covered in more detail.
- Include one current scholarly source from the CSU Global Library that you are likely to use in your final paper, exclusive of any course textbooks or lecture material.
- Format your submission to conform to the CSU Global Guide to Writing & APA.

## Option #2: Overview of Gas injection project in Oman

- Read the gas injection project case (linked in Portfolio Project Option 2 in the Module 8 folder).
- Examine the project management issues detailed in the case, including those concerning procurement, contracts, and risk management.
- Write an overview of one-half to one page (not including the required title and references pages) of the case and the project management issues to be covered in more detail.
- Include one current scholarly source from the CSU Global Library that you are likely to use in your final paper, exclusive of any course textbooks or lecture material.
- Format your submission to conform to the CSU Global Guide to Writing & APA.

## MODULE 3

### Readings

- Chapter 8 in *Mastering Risk and Procurement*
- Yu-Chih Liu, J., & Asri Rizki, Y. (2016). Differences between clients' and vendors' perceptions of IT outsourcing risks: Project partnering as the mitigation approach. *Project Management Journal*, 47(1), 45-58.

### Discussion (25 points)

#### Critical Thinking (100 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

#### **Option #1: Procurement Control**

1. Describe and compare procurement control and methods of purchase and contract control.
2. Give examples of at least two purchase and contract control methods in use on a project with which you are familiar, or on one that you identify through research.
3. Make sure your text includes:
  - a. A clear, researched, paraphrased definition of procurement control;
  - b. Techniques for purchase and contract control; and
  - c. Two examples of those control methods in use on projects.
4. Conclude with an example of a project not currently addressing purchase and contract control, but which could benefit from using such controls.

#### **Submission:**

- Support your paper with a minimum of two current (no older than five years) scholarly sources from the CSU Global Library, in addition to the textbook (which you **must** use as a source) and any course lecture material. You may always exceed the minimum number of sources.
- Format your paper according to the CSU Global Guide to Writing & APA.
- Your paper should be 3-4 pages long, not including the required title and references pages and any appendix you wish to include.

#### **Option #2: Procurement Monitoring**

1. Describe and compare procurement monitoring techniques and explain how problems may be identified through early warning signs.
2. Give examples of at least two early warning-sign triggers that could be identified for an item purchased for a work activity on a project with which you are familiar, or on one that you identify through research.

3. Make sure your text includes:
  - a. A clear, researched, and paraphrased definition of procurement monitoring;
  - b. Techniques for monitoring;
  - c. Early warning-sign triggers; and
  - d. Two examples of those triggers in use on projects.
4. Conclude with an example of a project not currently addressing early warning signs, but which could benefit from using early warning-sign monitoring. The project can be one you know personally, or you may reference a case from an article or case study.

**Submission:**

- Support your paper with a minimum of two current (no older than five years) scholarly sources from the CSU Global Library, in addition to the textbook (which you **must** use as a source) and any course lecture material. You may always exceed the minimum number of sources.
- Format your paper according to the CSU Global Guide to Writing & APA.
- Your paper should be 3-4 pages long, in addition to the required title and references pages and any appendix you include.

## MODULE 4

### Readings

- Part 1, Section 12.2 in *PMBOK® Guide*
- Noakes-Fry, K. (2016). Part I: Understanding the resilient supply chain. In K. Noakes-Fry (Ed.), *Creating and Maintaining Resilient Supply Chains* (14-63). Brookfield, CT: Rothstein Publishing.
- Woods Hole Oceanographic Institution [WHOI]. (2015). Managing bids and negotiating prices. Retrieved from <https://www.whoi.edu/procurement/managing-bids-negotiating-prices>

### Discussion (25 points)

#### Portfolio Milestone (25 points)

This week, choose the milestone option that corresponds to the option of Portfolio Project you will complete. (Review those options in the Week 8 folder.) Do not do both assignments. Identify your assignment choice in the title of your submission.

#### **Option #1: The Recovery Plan Project Case**

For this assignment, you will capture information that could form the appendices for your final paper.

1. Capture the following information:

- Identify risks and categorize each risk. Note: The categorization is up to you, but you might include such considerations as external risks (e.g., regulatory or currency changes) and technical risks (e.g. complexity or design).
- Prioritize the risks and discuss their severity.
- Identify management response strategies for the risks.
- Develop a Risk Breakdown Structure (RBS).

2. Include one current scholarly source from the CSU Global Library that you are likely to use in your final paper, exclusive of any course textbooks or lecture material.

3. Format your submission, including references page, according to the CSU Global Guide to Writing & APA.

#### **Option #2: The gas injection project case**

For this assignment, you will capture information that could form the appendices for your final paper.

1. Capture information based on the following questions:

- Who are the stakeholders?
- What are the risks with highest risk levels and the major risks impacting the project's cost?
- What risk responses do you think will be effective in treating the project risks identified (provide a minimum of five risk response strategies)?

2. Include one current scholarly source from the CSU Global Library that you are likely to use in your final paper, exclusive of any course textbooks or lecture material.

3. Format your submission, including references page, according to the CSU Global Guide to Writing & APA.

## MODULE 5

### Readings

- Chapter 1 in *Mastering Risk and Procurement*
- Part I, Chapter 11 in the *PMBOK® Guide*
- Fontaine, M. (2016). Chapter 4 – Project risk management. In P.A.J. Green (Ed.), *Enterprise Risk Management: A Common Framework for the Entire Organization*. Waltham, MA: Elsevier.

### Discussion (25 points)

#### Critical Thinking (125 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

#### **Option #1: Sources of Technical Risks**

In your required reading by Fontaine (2016), examine the information on technical risks to projects:

1. Identify an "intolerable technical risk" on a project with which you are familiar, or on one that you can research.
2. Describe the issue that created the intolerable technical risk and describe the risk itself.
3. Describe the treatment plan using cost-benefit analysis, where the risk severity is reduced to an acceptable level. (A risk register is not required for the paper with this option.)

#### **Submission Requirements:**

- For this assignment, you will be preparing your paper for submission to a conference or journal for publication, as well as submitting the paper to your instructor.
- You may submit the paper to your choice of outlet (conference or journal). Since you may be charged for your submission to some outlets, you should examine options for submission by searching the internet to find both the best fit for your paper and the acceptable cost to you. There are many journals and conferences that consider papers for publication. You might consider submitting to PMI Knowledge Shelf or AACEi Conferences. Another example is The Clute Institute, which publishes many journals and hosts conferences. Note that some journals accept undergraduate and/or graduate submissions. Visit the Council for Undergraduate Research to learn more. Read about the journal and the types of research it is interested in publishing. Make sure you understand the journal's submission guidelines. Some outlets require submissions in APA format and some do not; and some have special accommodations for student publications.

- This assignment does not require the student to submit the paper for publication, but it does require the student to prepare a scholarly paper \*\*for potential submission to a selected publication outlet \*\*with all the requisite academic and practical content in a format as stated in the publication guidelines. Again, the assignment includes that the student should identify the outlet, and deliver the scholarship and format of the paper in accordance with that publication's style guidelines. The professor will not submit your paper to the publication outlet as that is at the discretion of the student. Actual submission to the outlet is not part of the assignment requirements, but submission in the outlet's style guideline format to the instructor is.
- In an appendix after your references page, identify the following information for your submission: a) journal or conference name; b) why your paper is best suited for this outlet; and c) the submission guidelines in terms of process, requirements, cost, and general acceptance rates, if stated.
- Your paper must be 5-7 pages long, not including the required title and references pages and the appendix.
- Submit your paper in the format required by your selected outlet. (For example, if the outlet requires papers to be single spaced, then use single spacing.)
- Support your paper with a minimum of two current (no older than five years) scholarly sources from the CSU Global Library, in addition to any course lecture material you wish to use. You must also use the Fontaine (2016) reading as one of the sources in your paper. Of course, you may always exceed the minimum number of sources.
- Your entire paper must be formatted according to the CSU Global Guide to Writing & APA.

#### **Option #2: Sources of Project Risks**

Examine the information on risks to projects, as covered in this week's required reading by Fontaine (2016).

4. Identify a risk on a project with which you are familiar, or on one that you can research.
5. Describe the issue that created the project risk, what the risk is, and the treatment plan using cost-benefit analysis, where the risk severity is reduced to an acceptable level.
6. Include a project risk register as an appendix and describe it in your text.

#### **Submission Requirements:**

- For this assignment, you will be preparing your paper for submission to a conference or journal for publication, as well as submitting the paper to your instructor.
- You may submit the paper to your choice of outlet (conference or journal). Since you may be charged for your submission to some outlets, you should examine options for submission by searching the internet to find both the best fit for your paper and the acceptable cost to you. There are many journals and conferences that consider papers for publication. You might consider submitting to PMI Knowledge Shelf or AACSE Conferences. Another example is The Clute Institute, which publishes many journals and hosts conferences. Note that some journals accept undergraduate and/or graduate submissions. Visit the Council for Undergraduate Research to learn more. Read about the journal and the types of research it is interested in publishing. Make sure you understand the journal's submission guidelines. Some outlets require submissions in APA format and some do not; and some have special accommodations for student publications.
- This assignment does not require the student to submit the paper for publication, but it does require the student to prepare a scholarly paper \*\*for potential submission to a selected publication outlet \*\*with all the requisite academic and practical content in a format as stated in the publication guidelines. Again, the assignment includes that the student should identify the outlet, and deliver the scholarship and format of the paper in accordance with that publication's

- style guidelines. The professor will not submit your paper to the publication outlet as that is at the discretion of the student. Actual submission to the outlet is not part of the assignment requirements, but submission in the outlet's style guideline format to the instructor is.
- In an appendix after your references page, identify the following information for your submission: a) journal or conference name; b) how your paper is best suited for this outlet; and c) the submission guidelines in terms of process, requirements, cost, and general acceptance rates, if stated.
  - Your paper must be 5-7 pages long, not including the required title and references pages and the appendix.
  - Submit your paper in the format required by your selected outlet. (For example, if the outlet requires papers to be single spaced, then use single spacing.)
  - Support your paper with a minimum of two current (no older than five years) scholarly sources from the CSU Global Library, in addition to any course lecture material you wish to use. You must also use the Fontaine (2016) reading as one of the sources in your paper. Of course, you may always exceed the minimum number of sources.
  - Your entire paper must be formatted according to the CSU Global Guide to Writing & APA.

## MODULE 6

### Readings

- Chapters 3 & 5 in Mastering Risk and Procurement
- Part I, Sections 11.3 & 11.4 in PMBOK® Guide
- Part I, Chapter 8 in PMBOK® Guide

### Discussion (25 points)

#### Critical Thinking (125 points)

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission.

#### **Option #1: Beta Distribution**

(Note: This subject is often included in the PMP exam questions.)

You are the project manager for the Sweep Time software project. You have decided to use the beta distribution, or 3-point estimation, technique for this project. For the "phase 1 test" activity in days, the following estimates are available: O=5, P=10, M=6.

Address the following:

1. Explain beta distribution, when it is used, and the benefits and shortcomings of the technique.
2. What is the result of this estimate in the example?
3. How does a skew from the mean/median figure relate to planning a project? That is, if your beta is 7.5 and your M=6, how do these relate?

#### **Submission:**

- Write a 3- to 4-page paper addressing beta distribution. The length does not include the required title and references pages, and the appendix in which you show your calculations.
- Support your paper with a minimum of two current scholarly sources from the CSU Global Library, in addition to any course textbooks or lecture material. Note that for this assignment, current sources are those published in the past five years. Of course, you may always exceed the minimum number of sources.
- Format the entire submission according to the CSU Global Guide to Writing & APA.

## Option #2: Tornado Diagram

(Note: This is often included in the PMP exam questions.)

You are the project manager for the ClockWatch project. You have decided to construct a tornado diagram to review the sensitivity of resource costs with the project sponsor. The base formula for this project is as follows:

$$\text{Resource Cost} = \text{Operations Cost} + \text{Legal Cost} + \text{HR Cost} + \text{Marketing Cost}$$

The data is as follows (shown in thousands of dollars):

	O	M	P
Operations	4.5	8.5	12
Legal	3.5	4	7
HR	0.5	3	6
Marketing	0.25	0.5	1

Address the following:

1. Explain the tornado diagram, when it is used, and the benefits and shortcomings of the technique.
2. Use the data to construct a tornado diagram. (You may find this website helpful in constructing your tornado diagram.)
3. What is the result of this fair ranking of the value and decision sensitivity of the decision problem in the example? Which organization is most sensitive to the sponsor's decision and which is the least sensitive?

### Submission:

- Write a 3- to 4-page paper addressing your tornado diagram. The length does not include the required title and references pages, and the appendix in which you show your calculations.
- Support your paper with a minimum of two current (no older than five years) scholarly sources from the CSU Global Library, in addition to any course textbooks or lecture material. Of course, you may always exceed the minimum number of sources.
- Format the entire submission according to the CSU Global Guide to Writing & APA.

### **Portfolio Milestone (25 points)**

This week, choose the milestone option that corresponds to the option of Portfolio Project you will complete. (Review those options in the Week 8 folder.) Do not do both assignments. Identify your assignment choice in the title of your submission.

### **Option #1: The Recovery Plan Project Case**

For this assignment, you will document the conceptual steps taken in the project described in the Portfolio Project Option 1, which you can access in the Module 8 folder. Note: This milestone builds upon those milestones completed previously.

Document the following in a paper:

- Identify and describe the risk quantification methods based on the PMBOK Guide - Sixth Edition;
- Describe and assess qualitative risk assessment measures taken in the project as described in the case study; and
- Describe and apprise the steps taken in risk assessment and quantification (as outlined in the case study.)

**Submission:**

- Include one current (no older than five years) scholarly source that is not a required or recommended reading for this course. This should be a source you plan to use in your final paper. The CSU Global Library is a good place to find your source.
- Provide a minimum of a three page narrative by dedicating about a page to each of the three bullet points listed above.
- Format your paper according to the CSU Global Guide to Writing & APA.

**Option #2: The gas injection project case**

For this assignment, provide a minimum of three page narrative describing and assessing the following areas (discuss each of the following areas in about one page each

- Identify and describe the risk quantification methods based on the PMBOK Guide - Sixth Edition
- Describe the Monte Carlo method used in the case study and describe its benefits from the risk quantification and analysis perspective
- Discuss the likelihood of project completion within particular time frames as elaborated in the case study and explain how the model helped in findings these likelihoods.

**Submission:**

- Include one current (no older than five years) scholarly source that is not a required or recommended reading for this course. This should be a source you plan to use in your final paper. The CSU Global Library is a good place to find your source.
- Format your paper according to the CSU Global Guide to Writing & APA.

**MODULE 7**

**Readings**

- Chapter 7 in *Mastering Risk and Procurement*
- Part I, Sections 11.5 & 11.6 in *PMBOK® Guide*
- Part I, Chapter 2 in *PMBOK® Guide*

**Discussion (25 points)**

**MODULE 8**

**Readings**

- Pages 36, 37, 54, 55, 93, & 215 in *Mastering Risk and Procurement*
- Noakes-Fry, K. (2016). Part II: Contracting for a resilient supply train. In K. Noakes-Fry (Ed.), *Creating and Maintaining Resilient Supply Chains* (64-101). Brookfield, CT: Rothstein Publishing.

**Discussion (25 points)**

**Portfolio Project (275 points)**

Choose one of the following two assignments to complete this week. Do not do both assignments. Identify your assignment choice in the title of your submission. Note that both options require three milestones that are due in Weeks 2, 4, and 6, each worth 25 points.

### **Option #1: The Recovery Plan project**

Van Wyk, Bowen, & Akintoye. (2008). Project risk management practice: The case of a South African utility company. *International Journal of Project Management*, 26(2), 149-163

1. Examine the project management issues detailed in the case, including those concerning procurement, contracts, and risk management.
2. In no more than one page, give an overview of the case and the project management issues to be covered in more detail.
3. Discuss, in logical order, the following topics:

(Note: You must determine the logical order of these topics; this is part of your grade. See the grading rubric in this week's folder.)

- Risk identification
  - Risk assessment and prioritization
  - Risk response for prevention
  - Mitigation or contingent actions
  - The fundamental conceptual steps used to respond to project risks
  - The strengths and weaknesses of the project risk management practices
4. In an appendix, identify the risks and categorize each one. (This categorization is left to you; however, you might include external risks, such as regulatory and currency changes, or technical risks, such as complexity or design.) You must discuss the appendix in the body of your paper. In other words, do not simply say "see appendix," but rather explain what the appendix covers.
  5. Discuss the prioritization of the risks identified, their severity, and the management response strategies.

#### **Submission:**

- Write a paper addressing the Recovery Plan project. Your paper should be 8-10 pages in length, not including the required title and references pages and the appendix.
- Assess and critique the risk response strategies used and identify a minimum of three new recommended risk response strategies in response to the risks identified.
- Support your paper with a minimum of three to four current scholarly sources from the CSU Global Library (no older than five years). This is in addition to any course textbooks or lecture material you decide to use. Of course, you may always exceed the minimum number of sources.
- Format your entire paper according to the CSU Global Guide to Writing & APA.

### **Option #2: Gas injection project in Oman**

Read the gas injection project case:

Khadem, M., Piya, M., & Shamsuzzoha, R. (2018). Quantitative risk management in gas injection project: A case study from Oman oil and gas industry. *Journal of Industrial Engineering International*, 14(3), 637-654.

1. Examine the project management issues detailed in the case, including those concerning procurement, contracts, and risk management.
2. In no more than one page, give an overview of the case and the project management issues to be covered in more detail.
3. Discuss, in logical order, the following topics/questions:

(Note: You must determine the logical order of these topics; you will be graded on this requirement. See the grading rubric in this week's folder.)

- Who are the stakeholders?
- What are the risks with highest risk levels and the major risks impacting the project's cost?

- What risk responses do you think will be effective in treating the project risks identified (provide a minimum of five risk response strategies)
- What are the other project risks?
- Describe the Monte Carlo method used in the case study and describe its benefits from the risk quantification and analysis perspective
- What problems did Kalamandir face during project execution?

**Submission:**

- Write a paper addressing the project discussed in the case study, answering the questions listed above. Your paper should be 8-10 pages in length, not including the required title and references pages and the appendix.
- Discuss the likelihood of project completion within particular time frames as elaborated in the case study and explain how the model helped in findings these likelihoods.
- Support your paper with a minimum of three to four scholarly sources from the CSU Global Library (no older than five years). In addition, you may use any course textbooks or lecture material.
- Format your entire paper according to the CSU Global Guide to Writing & APA.

---

## COURSE POLICIES

---

Grading Scale	
A	95.0 – 100
A-	90.0 – 94.9
B+	86.7 – 89.9
B	83.3 – 86.6
B-	80.0 – 83.2
C+	75.0 – 79.9
C	70.0 – 74.9
D	60.0 – 69.9
F	59.9 or below

Undergraduate Course Grading	
0%	Opening Exercises
20%	Discussion Participation
37%	Critical Thinking Assignments
8%	Mastery Exercises
35%	Final Portfolio Project

---

## IN-CLASSROOM POLICIES

---

For information on late work and incomplete grade policies, please refer to our [In-Classroom Student Policies and Guidelines](#) or the Academic Catalog for comprehensive documentation of CSU Global institutional policies.

### **Academic Integrity**

Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Academic dishonesty includes cheating, fabrication, facilitating academic dishonesty, plagiarism, reusing /re-purposing your own work (see CSU Global Library page for Citing & APA Resources and Avoiding Common Plagiarism Mistakes for percentage of repurposed work that can be used in an assignment), unauthorized possession of academic materials, and unauthorized collaboration. The CSU Global Library provides information on how students can avoid plagiarism by understanding what it is and how to use the Library and Internet resources.

### **Citing Sources with APA Style**

All students are expected to follow APA format for all assignments. For details, please review the APA guidelines within the CSU Global Writing Center. A link to this resource should be provided within most assignment descriptions in your course.

### **Disability Services Statement**

CSU Global is committed to providing reasonable accommodations for all persons with disabilities. Any student with a documented disability requesting academic accommodations should contact the Disability Resource Coordinator at 720-279-0650 and/or email [ada@CSUGlobal.edu](mailto:ada@CSUGlobal.edu) for additional information to coordinate reasonable accommodations for students with documented disabilities.

### **Netiquette**

Respect the diversity of opinions among the instructor and classmates and engage with them in a courteous, respectful, and professional manner. All posts and classroom communication must be conducted in accordance with the student code of conduct. Think before you push the Send button. Did you say just what you meant? How will the person on the other end read the words?

Maintain an environment free of harassment, stalking, threats, abuse, insults or humiliation toward the instructor and classmates. This includes, but is not limited to, demeaning written or oral comments of an ethnic, religious, age, disability, sexist (or sexual orientation), or racist nature; and the unwanted sexual advances or intimidations by email, or on discussion boards and other postings within or connected to the online classroom. If you have concerns about something that has been said, please let your instructor know.