

Unit 4 Assignment

Hazard Identification, Risk Assessment, and Prioritization

Due: Unit 4

Points: 100

Risk identification and impact assessment is the process of assessing the probabilities and consequences of risk events, if they are realized. The results of this assessment are then used to prioritize risks to establish a most-to-least-critical importance ranking. Ranking risks in terms of their importance provides insights on where resources may be needed to manage or mitigate the high probability/high consequence risk events to maintain a safe, healthy workplace.

The goal of these assignments is to practice producing risk assessment reports for upper managers; with each assignment, you will build toward the full risk assessment report. When submitting reports to managers, you want to produce a professional looking document that has the essential information required, and the information you provide needs to be easily understood, yet concisely written. Therefore, keep in mind the format, wording, and grammar as you write.

Instructions:

Using the job description you chose in Unit 2, identify the hazards associated with that job and then assess those risks. Below are details about the specifics to include for this assignment and content within each section.

1. **Job description** – include the job description that you chose for your Unit 2 assignment.
 - a. You may include updates or edits to the position based on your further work or Professor's comments.

2. **Hazard Identification** – Use the *RSC Risk Assessment at Work* document attached to help you determine the details to include.
 - a. Make a table of the physical hazards, chemical hazards, biological hazards, natural phenomena, and other hazards that would be faced by a person performing the job you have chosen. Your table should include a thoughtful representation of the hazards involved in the position, but does not need to be exhaustive of all possible hazards.
 - i. Your table should have three column headings
 1. The type of hazard - physical, chemical, biological, natural, or other
 2. The hazard - such as hand tools, explosions, ergonomic concerns, discrimination

3. Description or examples – for some jobs, the hazards are more apparent and straight-forward. For those less familiar with the position, you can clarify your point with examples or a short description. For example, if the hazard were hand tools, briefly describe why they would be using hand tools and which ones; for explosions, describe under what circumstances a worker would be around or exposed to an explosion and what type.
 - b. In a few paragraphs, describe the primary hazards you identified in your table. Your goal is to provide good detail about the hazards associated with the position in paragraph form. Your description should be at least 350 words.
 - i. Think of having to hire someone for that position. Information in this paragraph would help those making hiring decisions in terms of the required experience, training, or overall health. It would also help potential employees understand the position and what they would be doing.
3. **Risk Assessment** - Use the *RSC Risk Assessment at Work* document attached to provide a few more details. Much of this is subjective, meaning that there is not one correct answer or that your answer could depend on a lot of other factors. Use your best judgment; think as if you were in a management position and were in charge of the health and safety of workers performing this job.
- a. Make a copy your table from the previous section (Hazard Identification) and add three more columns.
 - i. Your new table will have all the columns from the previous section and the following:
 1. Event probability - likelihood of an event or the probability of the event occurring. Rank the probability of a worker having a negative issue because of that hazard. How likely is the worker to be exposed to that hazard?
 - a. Use a classification system of the following with the associated number ranking
 - i. highly likely (1)
 - ii. likely (2)
 - iii. even chance (3)
 - iv. unlikely (4)
 - v. highly unlikely (5)
 2. Severity of the outcome – assess the general severity of the exposure; if a person is exposed to the hazard, how would that person be affected?
 - a. Catastrophic (1) -such as death or catastrophic mental or bodily impairment
 - b. Significant (2) – long-term disabling illness or injury (months to years)
 - c. Moderate (3) – short-term illness or injury (days to weeks)
 - d. Minor (4) – very short-term illness (hours to days)
 - e. None (5) – no impairment of mental or physical condition

3. Overall Risk – Risk is the combination of event probability and the severity of the outcome. Rank the risk of that hazard using the following scale. Again, this is subjective, but use your best judgment. For example, for probability, you may have ‘likely’ and for severity, you may have ‘minor’. For risk, you may then choose ‘moderate (3)’ an average of the two OR you could choose ‘significant (2)’ or ‘minor (4)’ based on your assessment. Using this example, you would likely NOT choose ‘high (1)’ or ‘no risk (5)’ or you should think of changing the value in some of your columns.

- a. High risk (1)
- b. Significant risk (2)
- c. Moderate risk (3)
- d. Minor risk (4)
- e. No risk (5)

b. In a few paragraphs, describe the primary risks you associate with this position. Your goal is to provide **good detail** about the risks in order to help make decisions about how to mitigate those risks (in a later assignment). Whenever you provide a table, it is very helpful to also provide a written description of the important information in that table. Tables provide a lot of detail and the written description should include the important aspects of that table. Your written description for this portion should be at least 400 words.

- i. Note: In the assignment due in Unit 7, you will finish this report and describe some strategies that will decrease the likelihood of the event or severity of the outcome. These strategies could include protective procedures, PPE, training, or other. Do not include these aspects in this assignment.

4. **Prioritization** – prioritize the top risks (5 to 10 risks) that are associated with this position. If you were responsible for workers performing this job, which risks would you want to mitigate first and why? Describe your prioritization scheme in at least 250 words.

Submittal:

1. Submit a Microsoft Word document with all **four** sections (Job Description, Hazard Identification, Risk Assessment, and Prioritization) and the two tables (one table in the Hazard Identification section and one table in the Risk Assessment section). Contact your Professor if you have questions.

Grading:

For any assignment less than the minimum word count, a percentage will be taken off. For example, if 200 words are provided for a 250 word minimum, the highest grade that can be obtained will be 80% ($200/250 = 0.80$).

The submitted work is then graded according to the writing rubric available under Course Information.