Universidad Nacional Abierta y a Distancia
Vicerrectoría Académica y de Investigación
Course: Food packaging
Code: 216006

Activity Guide and Evaluation Rubric – Phase 4 Analysis and control of the project

1. Activity Description

Type of Activity: Collaborative	
Evaluation Moment: Intermediate Unit 3	
Highest Activity Score: 70 points	
The activity starts on: saturday, april 10, 2021	**The activity ends on:** sunday, may 09, 2021

With this activity, the following learning outcomes are expected:

Relate the mass transfer phenomena and migration between the food – packaging - environment through the analysis of concepts and fundamentals, positive lists and migration mechanisms, in order to determine the optimal storage conditions of the food or beverage, integrity of the packaging - product and estimate its shelf life.

The activity consists of:

⇒ **<u>At individual level:</u>**

Describe the main transfer phenomena, laws and equations, the that occur in the food - packaging - environment system:

1. Permeability
2. Absorption
3. Diffusion
4. Migration; overall, partial and specific

⇒ **At the collaborative level:**

Answer the following questions considering the above concepts and the packaging material and product selected collaboratively in Phase 2 and Phase 3:

1. Is it possible for gases, odors and water vapor to penetrate through the packaging from the environment to the food or drink? Analyze the situation in the cities of Barrancabermeja and Tunja.
2. Is it possible that the packaging can absorb components of the food or drink? Analyze the situation in the cities of Barrancabermeja and Tunja.
3. Is it possible that the food or beverage can absorb components of the packaging material? Analyze the situation in the cities of Leticia and Tunja.
4. According to the positive lists, which are the main compounds that could possibly migrate from the selected packaging material (Phase 2) to the food (Phase 3) and what are the laboratory-level tests that are performed to determine this migration.

keep in mind for the development of the activity:

In the Initial Information Environment, you must:

- Check the agenda for the delivery date of the activity.
- Review the care schedule via Skype for clarification of doubts.
- Keep in mind the scheduling of web conferences.

In the Learning Environment, you must:

- Address bibliographic references arranged to be studied.
- Make judicious reading activities and to guide its implementation.
- Keep in mind the evaluation rubric, in each of its criteria.

- Participate actively in the discussion forum giving contributions for the construction of what is requested in the activity guide.

In the Evaluation Environment, you must:

- Attach the results obtained from collaborative work as requested in the activity guide, in PDF format.

Individual Work Evidences:
The individual evidence to be submitted is:

- The student in the respective forum will present their individual work proposal for the development of the project proposed at the group level.
- Give individual contributions, which will be constructive and on the stipulated date.
- Make meaningful feedback to the contributions given by colleagues

It is essential that the contributions before being sent to the forum be passed by Turnitin anti-plagiarism software; for this visit turnitin http://hdl.handle.net/10596/13941

Collaborative Evidences:
The collaborative evidence to be submitted is:

The group will select through academic debate the best contributions related to mass transfer phenomena and migration between the food – packaging – environment, with which you will continue the course project and subsequently develop the established items for collaborative work

It is essential that the final work before being delivered has been passed by Turnitin antiplag software; for this visit turnitin http://hdl.handle.net/10596/13941

2. General Guidelines for the Development of Evidences to Submit.

For **Collaborative** evidence, consider the following:

- All members of the group must participate with their contributions in the development of the activity.
- In each group a single member will be chosen to submit the requested product in the environment indicated by the teacher.
- Before submitting the requested product, students should check that it meets all the requirements mentioned in this activity guide.
- Only the members of the group that participated with contributions during the time assigned for the activity should be included as authors of the submitted product.

Please keep in mind that all individual or collaborative written products must comply with the spelling rules and presentation conditions defined in this activity guide.
Regarding the use of references, consider that the product of this activity must comply with **APA** Format.

In any case, make sure you comply with the rules and avoid academic plagiarism. You can review your written products using the Turnitin tool found on the virtual campus.

Under the Academic Code of Conduct, the actions that infringe the academic order, among others, are the following: paragraph e) "Plagiarism is to present as your own work all or part of a written report, task or document of invention carried out by another person. It also implies the use of citations or lack of references, or it includes citations where there is no match between these and the reference" and

paragraph f) "To reproduce, or copy for profit, educational resources or results of research products, which have rights reserved for the University ". (Acuerdo 029 - 13 de diciembre de 2013, Artículo 99)
The academic penalties students will face are:
a) In case of academic fraud demonstrated in the academic work or evaluation, the score obtained will be zero (0.0) without any disciplinary measures being derived.
b) In case of proven plagiarism in academic work of any nature, the score obtained will be zero (0.0), without any disciplinary measures being derived.

3. Evaluation Rubric

Type of Activity: Collaborative	
Evaluation Moment: Intermediate Unit 3	
Highest Activity Score: 70 points	
First Evaluation Criterion: Participation criteria: Intervention within the discussion forum - Individual **This criterion represents 10 points of the total of 70 points of the activity.**	**High Level:** Actively involved in the academic debate within the discussion forum, with significant contributions to the development of the activity. **If your work is at this level, you can get between 7 points and 10 points** **Average Level:** Participates in the academic debate within the discussion forum, with moderately significant contributions to the development of the activity. **If your work is at this level, you can get between 4 points and 6 points** **Low level:** Intervenes in the academic debate within the discussion forum, with little significant contributions to the

	development of the activity or does not participate in the activity. **If your work is at this level, you can get between 0 points and 3 points**
Second Evaluation Criterion: Transfer and migration phenomena - Individual **This criterion represents 30 points of the total of 70 points of the activity.**	**High Level:** Correctly describes the phenomena of mass transfer (permeability, absorption, diffusion) and migration (overall, partial and specific) in the food - packaging - environment system and the laws that govern them. **If your work is at this level, you can get between 20 points and 30 points** **Average Level:** Partially describes the phenomena of mass transfer (permeability, diffusion absorption) and migration (overall, partial and specific) in the food - packaging - environment system and the laws that govern them. **If your work is at this level, you can get between 10 points and 19 points** **Low level:** No describe the phenomena of mass transfer (permeability, diffusion absorption) and migration (overall, partial and specific) in the food - packaging - environment system or the laws that govern them. **If your work is at this level, you can get between 0 points and 9 points**
Third Evaluation Criterion:	**High Level:** Correctly analyzes the phenomena of mass transfer and migration, relating the interactions that exist

Content criteria: Relationship of transfer and migration phenomena in the environment - packaging - product - Collaborative **This criterion represents 20 points of the total of 70 points of the activity.**	between environment - packaging - product in different climatic conditions. **If your work is at this level, you can get between 14 points and 20 points** **Average Level:** Partially analyzes the phenomena of mass transfer and migration, and relates some of the interactions that exist between environment - packaging - product in different climatic conditions. **If your work is at this level, you can get between 6 points and 13 points** **Low level:** No analyze the phenomena of mass transfer and migration, nor does it relate the interactions that exist between environment - packaging - product in different climatic conditions. **If your work is at this level, you can get between 0 points and 5 points**

Fourth Evaluation Criterion: Procedural criteria: Intermediately document of the course project - Collaborative **This criterion represents 10 points of the total of 70 points of the activity.**	**High Level:** Completely and organized delivered of collaborative work as established in the Activity Guide **If your work is at this level, you can get between 7 points and 10 points** **Average Level:** Incomplete and organized delivery of collaborative work as established in the activity guide **If your work is at this level, you can get between 4 points and 6 points** **Low level:** No deliver the collaborative work in a complete or organized way as established in the activity guide **If your work is at this level, you can get between 0 points and 6 points**