

## **VET Training for Hospitality and Tourism Sector**

# Hygiene and sanitary control protocols in catering in Tourism

### **Target audience**

VET students of EQF level 3 and 4, and tourism staff from small businesses in the Catering and Tourism sector.

## **Problem to solve - Learning Situation**

Food hygiene standards are essential conditions for the promotion of a quality business in the Tourism and Catering sector, whether it is a small business or a larger company. Teams must be prepared to ensure food safety and hygiene in catering and drinking establishments, whether or not integrated in hotels, taking into account the standards in place, like HACCP standards.

The employees of many small businesses in the catering sector only have the minimum knowledge related to the implementation of the HACCP rules, resorting to external consulting companies for the implementation of the requirements of this standard in their activity.

This scenario for VET students of EQF 3 and 4 levels includes a set of learning activities to prepare VET students to plan and execute food service that ensures hygiene and safety conditions according to HACCP principles, in order to guarantee a quality service and customer satisfaction.



### **Overview of scenario**

In this learning scenario, we propose a number of activities aimed at activating learners' practice. Active teaching methods will be used, supported by "Project based learning", inviting the participation and intervention of the trainee. There will be synchronous (face-to-face or online) and asynchronous moments.

Different activities can be performed according to the level of the trainees - 3rd and 4th EQF levels. Level 3 activities are more practical and level 4 more managerial.







Figure 1: Serving food in tourism businesses, like restaurants, demands specific hygiene standards. <u>Food hygiene photo</u> by zinkevych - <u>www.freepik.com</u>

### Competencies covered from DigCompEdu

Add the original statements from IO1

#### Area 2: Digital resources

#### 2.1 Selecting digital resources

To identify, assess and select digital resources to support and enhance teaching and learning. To consider the specific learning, objective, context, pedagogical approach, and learner group, when selecting digital resources and planning their use.

#### 2.2 Creating and modifying digital resources

To modify and build on existing openly-licensed resources and other resources where this is permitted. To create or cocreate new digital educational resources. To consider the specific learning objective, context, pedagogical approach, and learner group, when designing digital resources and planning their use.

#### 2.3 Managing, protecting and sharing digital resources

To organise digital content and make it available to learners, parents and other educators. To effectively protect sensitive digital content. To respect and correctly apply privacy and copyright rules. To





understand the use and creation of open licences and open educational resources, including their proper attribution.

#### **Area 3: Teaching and Learning**

#### 3.1 Teaching

To plan for and implement digital devices and resources in the teaching process, so as to enhance the effectiveness of teaching interventions. To appropriately manage and orchestrate digital teaching interventions. To experiment with and develop new formats and pedagogical methods for instruction.

#### 3.2 Guidance

To use digital technologies and services to enhance the interaction with learners, individually and collectively, within and outside the learning session. To use digital technologies to offer timely and targeted guidance and assistance. To experiment with and develop new forms and formats for offering guidance and support.

#### 3.3 Collaborative Learning

To use digital technologies to foster and enhance learner collaboration. To enable learners to use digital technologies as part of collaborative assignments, as a means of enhancing communication, collaboration and collaborative knowledge creation.

#### Area 4: Assessment

#### 4.1 Assessment strategies





To use digital technologies for formative and summative assessment. To enhance the diversity and suitability of assessment formats and approaches.

#### 4.2 Analysing evidence

To generate, select, critically analyse and interpret digital evidence on learner activity, performance and progress, in order to inform teaching and learning.

#### **Area 5: Empowering Learners**

#### 5.3 Actively engaging learners

To use digital technologies to foster learners' active and creative engagement with a subject matter. To use digital technologies within pedagogic strategies that foster learners' transversal skills, deep thinking and creative expression. To open up learning to new, real-world contexts, which involve learners themselves in hands-on activities, scientific investigation or complex problem solving, or in other ways increase learners' active involvement in complex subject matters.

#### Area 6: Facilitating learners' digital competence

#### 6.1 Information and media literacy

To incorporate learning activities, assignments and assessments which require learners to articulate information needs; to find information and resources in digital environments; to organise, process, analyse and interpret information; and to compare and critically evaluate the credibility and reliability of information and its sources.

#### 6.2 Digital communication and collaboration





To incorporate learning activities, assignments and assessments which require learners to effectively and responsibly use digital technologies for communication, collaboration and civic participation.

#### 6.3 Digital content creation

To incorporate learning activities, assignments and assessments which require learners to express themselves through digital means, and to modify and create digital content in different formats. To teach learners how copyright and licence apply to digital content, how to reference sources and attribute licences.

#### 6.5 Digital problem solving

To incorporate learning activities, assignments and assessments which require learners to identify and solve technical problems, or to transfer technological knowledge creatively to new situations.

## **Curriculum Construct(s)**

According to Revised Bloom's Taxonomy (Anderson and Krathwohl, 2001), the learning scenario applies to 6 areas:

- **Remembering**: Retrieving, recognizing, and recalling relevant knowledge acquired in the theoretical part of class about food hygiene and standards in the Tourism sector.





- Understanding: Understanding the importance of food safety and implementation of hygiene standards in catering and drinking establishments.
- Applying: Applying knowledge regarding Food Safety in Tourism gained through the theory into practice
- Analyzing: investigating the characteristics of a catering business, its needs in terms
   of food safety procedures
- Evaluating: assessing all the steps needed to implement a HACCP plan in the business;
   the possible hazards and respective control measures
- **Creating**: producing a simple HACCP plan for the chosen catering business.

### **Scenario description**

This scenario is aimed at VET students that will be working in the tourism catering services in order to plan and execute food service that ensures hygiene and safety conditions according to HACCP standards. The scenario is prepared in such a way as to be implemented online (e-learning) or in a complement to face to face learning using digital apps/software/platforms, to increase digital competences in learners and teachers.





### **Scenario Objectives**

- To know the importance of Hygiene and Food Safety;
- To identify the systematic methodology for implementing the HACCP system;
- To calculate the risk according to the severity and probability of the hazard, based on a production flow chart.
- To create a HACCP plan (main steps).

#### The topics covered are:

- Introduction to Food Safety
- HACCP system
  - Methodology
  - o 7 HACCP Principles and 12 HACCP application steps

### **Requirements**

As for the tutor prerequisites (and learners), we suggest implementing the activities suggested in this learning scenario by those who have already mastered the intermediate digital skills in DigCompEdu, as mentioned above.

It is therefore essential for the tutor to undertake, beforehand, the IDC-VET self-assessment tool, to ensure consistency with this requirement.





#### **DIGITAL EQUIPMENT:**

- Computers
- Internet access
- Camera and microphone (if the sessions are online and synchronous)
- LMS (like Moodle) and accounts for tutor and learners
- Lino account for the tutor
- Google account (if usage of Google Drive) tutor and learners
- Miro account for the learners
- Photo camera (if the business used for field work is a real one)

# **Outline plan**

Activity 1	Introduction to Food Safety in Tourism
Timing	2 hours
Methods	Lecturing, presentation, questions-answers. Active learning.
What the tutor is doing	- The tutor presents the main concepts and theory about the topic of food safety in tourism businesses. The tutor should use presentations, videos and provide links to





make the session more dynamic and motivate learning.

- If the theory part is provided online (and not face-to-face), the tutor should make available to students all the material (presentations, videos, links, link to synchronous session, etc.) by an LMS platform, where he/she should also create an account for each student/trainee.
- The tutor organizes the presentation of the activities by describing them on the LMS: assignment description, aims, timing, and feedback management.
- On Lino software, the tutor creates a virtual bulletin board for digital sticky notes where learners are invited to contribute. For that, the tutor has to have an account on Lino. The Lino board should include 3 topics, and each learner should contribute to each of these topics in columns with examples/applications: a) examples of businesses where HACCP is applied; b) why health and food safety is important (examples); c) links to news/articles/books or photos about the topic. After creating the board, the tutor will share it with the learners for them to start contributing.
- On the LMS (like Moodle), the teacher should create a





	quiz test for the learners to respond in the final part of the activity, to assess if the aims of the topic were accomplished by learners. The quiz should include automatically marked results and feedback, and could be created on the LMS itself or in a different software (like Quizziz or other) – in this case, the link to the outside quiz should be provided in the LMS to all students to access.
What the learners are doing	<ul> <li>Learners learn about the topics presented by the teacher. They can access all the provided material through the LMS platform with the personal accounts provided by the tutor.</li> <li>After the theory part of class (either face-to-face or online/synchronous), the learner will:         <ul> <li>Access the Lino bulletin board created and shared by the tutor</li> </ul> </li> <li>Contribute to each topic provided by the tutor with examples (and include the name of the learner): include text, images, links, video. For that, the learner has to use search engines to find suitable material to participate on the Lino board.</li> <li>Access the quiz provided by the tutor, and answer all</li> </ul>





	questions, receiving immediate feedback from the used platform.  - take the online quiz created by the tutor to assess knowledge.
Equipment and Support	Computer with internet, presentation software, LMS platform, Lino (account for the tutor and link for the learner, search engines.
Reference to DigCompEdu	02 Digital resources - 2.1 Selecting digital resources (B2) 02 Digital resources - 2.2 Creating and modifying digital resources (C1) 02 Digital resources - 2.3 Managing, protecting and sharing digital resources (B2) 03 Teaching and Learning - 3.1 Teaching (B2) 03 Teaching and Learning - 3.2 Guidance (B2) 03 Teaching and Learning - 3.3 Collaborative Learning (C1) 04 Assessment - 4.1 Assessment strategies (B2) 04 Assessment - 4.2 Analysing evidence (B2) 05 Empowering Learners - 5.3 Actively engaging learners (B2) 06 Facilitating learners' digital competence - 6.1 Information and media literacy (C1) 06 Facilitating learners' digital competence - 6.2 Digital communication and collaboration (B2) 06 Facilitating learners' digital competence - 6.3 Digital content creation (B2)





	06 Facilitating learners' digital competence - 6.5 Digital problem solving (B2)
Assessment of/for learning	Assessment of learning - formative and summative assessment: Virtual bulletin board (Lino) for digital students' contributions. Quiz test for the learners. Class discussion.
Resources/links/relevant content/Examples	https://en.linoit.com How to Cite a Website in APA Style   Format & Examples: https://www.scribbr.com/apa-examples/website/

Activity 2	HACCP system - Methodology and risk analysis
Timing	5 hours
Methods	Lecturing, presentation, questions-answers. Active learning. Group discussion and group reflection
What the tutor is doing	<ul> <li>Presentation of the main topics regarding HACCP methodology, its 7 principles and 12 steps. The tutor uses a powerpoint presentation (or similar software), and videos/examples, etc.</li> <li>After, the class is split into small groups for practical</li> </ul>





	of the HACCP system (see "what the learners are doing"). The tutor prepared material to be used by learners: HACCP checklists and technical sheets created by the teacher or searched online and validated according to copyright/licenses and technical validation, and a cloud/online folder (like google drive) to share with the learners, where they should publish their activity's results. These documents should be provided to learners through the LMS, and the learners should use the cloud online folder to collaborate amongst themselves during the activity, and to submit the final reports. Tutor will provide feedback during the exercise and after the final submissions.  If the catering business that learners will work on is an existing/real one, the tutor must create a non-disclosure agreement for each learner, so that by signing it they comprehend that they cannot disseminate the information acquired in the business
What the learners are doing Learne	disseminate the information acquired in the business for the development of the activities, except in class.  ers learn about the HACCP system through the





face-to-face presentation by the tutor and/or accessing the online material provided in the class LMS.

#### Exercise:

In small groups, each learner group should:

- select and define a small catering/restaurant business (preferably an existing one or fictitious if not possible) for field work;
- if the business is an existing one, the learners will sign a non-disclosure agreement.
- the groups have to analyze the selected business in terms of products and then apply the 6 stages and the 1st Principle of the HACCP system. In the cloud drive provided by the teacher, the groups will have to create:
  - a document with the constitution of the HACCP team in the selected catering business
  - a document with the description of the hazards and its severity (describe the products, their ingredients and processing methods by preparing technical sheets, which should mention the method of distribution). It should include photos.
  - Identification of the intended use for the products
  - Construction of flowchart by using the





	software Miro, each learner group can create a flowchart, a clear and simple diagram of the steps involved in the process. After, if possible, each team should carry out an on-site check to ensure that the flow chart is correct.  • Each group will create a table in the cloud shared folder with the hazard analysis and description of causes and respective preventive measures in each step (each group member has to collaborate in the creation and completion of this document). Risk analysis.  All the documents, reports of the groups will be made available in the cloud drive to the tutor, to evaluate. After submitting these reports, all learners will have a group discussion with the teacher to debate how the activities were accomplished, what difficulties they found, and learn
	from each other (group reflection).
Equipment and Support	Computer with internet, presentation software, LMS platform, cloud drive, Miro account, search engines, camera (to take pictures of the business in the field work).
Reference to DigCompEdu	02 Digital resources - 2.1 Selecting digital resources (B2) 02 Digital resources - 2.2 Creating and modifying digital resources (C1) 02 Digital resources - 2.3 Managing, protecting and sharing digital resources (B2)





	03 Teaching and Learning - 3.1 Teaching (B2) 03 Teaching and Learning - 3.2 Guidance (B2) 03 Teaching and Learning - 3.3 Collaborative Learning (C1) 04 Assessment - 4.1 Assessment strategies (C1) 04 Assessment - 4.2 Analysing evidence (B2) 05 Empowering Learners - 5.3 Actively engaging learners (B2) 06 Facilitating learners' digital competence - 6.1 Information and media literacy (B2) 06 Facilitating learners' digital competence - 6.2 Digital communication and collaboration (C1) 06 Facilitating learners' digital competence - 6.3 Digital content creation (B2) 06 Facilitating learners' digital competence - 6.5 Digital problem solving (B2)
Assessment of/for learning	Assessment of learning - formative assessment: Group discussion and group reflection; Analysis of group tasks: documents/reports/flow charts/shared tables created by learners.
Resources/links/relevant content/Examples	https://miro.com https://drive.google.com https://safetyculture.com/checklists/haccp/ (some HACCP templates)





Activity 3	HACCP plan
Timing	3 hours
Methods	Lecturing, presentation, questions-answers. Active learning. Group discussion and group reflection.
What the tutor is doing	<ul> <li>Presentation of the main topics regarding HACCP (2<sup>nd</sup> to 6<sup>th</sup> principle) and HACCP plan. The tutor uses a powerpoint presentation (or similar software), and videos/examples, etc.</li> <li>The tutor will provide a template of the HACCP plan in the class LMS, and the learners should use the cloud online folder to collaborate amongst themselves during the activity, and to submit the final reports.</li> <li>Tutor will provide feedback during the exercise and after the final submissions.</li> </ul>
What the learners are doing	<ul> <li>In groups, learners will create a shared table (each group) in the cloud/online folder with the HACCP plan for the catering business already considered in the activity 2. The HACCP Plan has to include the identification of the Critical Control Points (CCP) for the previous steps and hazards analysis already</li> </ul>





	accomplished in activity 2, the critical limits, monitorization system of each CCP, corrective actions,  - They can use a table structure provided by the tutor on the class LMS, and consider the decision-making tree of the Codex Alimentarius.  All the documents, reports of the groups will be made available in the cloud drive to the tutor, to evaluate. After submitting these reports, all learners will have a group discussion with the teacher to debate how the activities were accomplished, what difficulties they found, and learn from each other (group reflection).
Equipment and Support	Computer with internet, presentation software, LMS platform, cloud drive, search engines.
Reference to DigCompEdu	02 Digital resources - 2.1 Selecting digital resources (B2) 02 Digital resources - 2.2 Creating and modifying digital resources (C1) 02 Digital resources - 2.3 Managing, protecting and sharing digital resources (B2) 03 Teaching and Learning - 3.1 Teaching (B2) 03 Teaching and Learning - 3.2 Guidance (B2) 03 Teaching and Learning - 3.3 Collaborative Learning (C1) 04 Assessment - 4.1 Assessment strategies (B2) 04 Assessment - 4.2 Analysing evidence (B2) 05 Empowering Learners - 5.3 Actively engaging learners (B2) 06 Facilitating learners' digital competence - 6.1 Information





	and media literacy (B2) 06 Facilitating learners' digital competence - 6.2 Digital communication and collaboration (B2) 06 Facilitating learners' digital competence - 6.3 Digital content creation (B2) 06 Facilitating learners' digital competence - 6.5 Digital problem solving (B2)
Assessment of/for learning	Assessment of learning - formative assessment: Group discussion and group reflection; Analysis of group tasks: documents/reports/shared tables created by learners following field work.
Resources/links/relevant content/Examples	https://www.fao.org/3/Y1390E/y1390e0g.htm (decision-making tree in Codex Alimentarius)

## Our notes from practice

This learning scenario includes a diversity of hand-on activities to promote learning among learners, also by mixing individual and group activities, all interconnected. This ensures that multiple skills can be developed, including digital skills and team work.

We consider that the majority of activities should be developed in groups (small or larger) and not individually, as the HACCP topic is complex. By working in groups, learners can delegate





tasks between group members and learn from each other. Case studies and comments from other VET educators.

