# Skills assessment 1

**Assessment event 4 of 6**

# Trainer & Assessor Marking Guide

## Criteria

### Unit code, name and release number

MSL974021 - Perform biological procedures (1)

### Qualification/Course code, name and release number

MSL50118 - Diploma of Laboratory Technology (1)

MSL40118 - Certificate IV in Laboratory Techniques (1)

\*\*Amend the qualification box before distributing to the student. The information here should only contain the qualification the student is enrolled in\*\*

Version: *1.0*

Date created: 23/09/2019

Date modified: 27/11/2019

For queries, please contact:

Innovative Manufacturing, Robotics and Science SkillsPoint

Hamilton Campus

© 2018 TAFE NSW, Sydney  
RTO Provider Number 90003 | CRICOS Provider Code: 00591E

This assessment can be found in the: [Learning Bank](https://share.tafensw.edu.au/share/access/searching.do?doc=%3Cxml%2F%3E&in=P7ac4831b-430a-4b8d-8b56-f7b32ed5b9cf&q=&type=standard&sort=rank&dr=AFTER)

The contents of this document are copyright © TAFE NSW 2018, and should not be reproduced without the permission of the TAFE NSW. Information contained in this document is correct at time of printing: 27 November 2019. For current information please refer to our website or your teacher as appropriate.

## Assessment instructions

Table 1 Assessment instructions

| Assessment details | Instructions |
| --- | --- |
| **Instructions for the trainer and assessor** | This is a skill based assessment and will be assessing the student on their ability to demonstrate skills required in the unit.  This assessment is in 3 parts:   1. Multistep staining 2. Observation Checklist 3. Assessment feedback   Model answers, sample responses or criteria for each task or activity are provided below.  Use these to support your judgement when determining a satisfactory result.  The student’s response to each question must contain the information indicated in this marking guide in order for their response to be correct. However, if a student provides information other than indicated below, and in the professional opinion of the assessor it is appropriate and meets the intent of the question, it may be considered correct.  Complete the Observation Checklist for each task and activity and the Assessment Feedback to the student. Ensure you have taken a copy of the assessment prior to it being returned to the student.  The Assessment Feedback page must be signed by both the student and the assessor so the student displays that they have received, understood and accepted the feedback.  Ensure the students name appears on the bottom of each page of the submitted assessment. |
| **About this marking guide** | The student’s response to each task or activity must contain the criteria indicated in this marking guide in order for their response to be correct.  All tasks and activities must be completed correctly in order to satisfactorily complete this assessment event.  Assessors will need to make a judgement call as to whether each response meets the criteria based upon the:   * Rules of Evidence:   + Validity – does the answer address the skill required and does the evidence reflect the four dimensions of competency?   + Sufficiency – is the task or activity sufficient in terms of length and depth?   + Currency – has the work been done so recently as to be current?   + Authenticity – is this work the student’s own authentic work? * Principles of Assessment   + Fairness – individual student’s needs are considered in the assessment process   + Flexibility – assessment is flexible to the individual student   + Validity – any assessment decision is justified, based on the evidence of performance of the student   + Reliability – evidence presented for assessment is consistently interpreted and assessment results are comparable irrespective of the assessor conducting the assessment * Dimensions of competency   + Task skills   + Task Management Skills   + Contingency Planning Skills   + Job Role Environment Skills |
| **Student must provide** | Pens, pencils, appropriate clothing – long pants and sleeves, closed shoes and long hair tied back. |
| **Assessor must provide** | Laboratory  Equipment and reagents listed in the following SOPs, as well as a copy of each SOP for students to work through:   1. Standard operating procedure *M409: Bacterial classification and identification* 2. Form *F409: Bacterial ID worksheet*   Please note that standard operating procedures and forms will be available on Learning Bank at the start of 2020. Contact IMRS SkillsPoint if you require a copy earlier. |
| **Due date/time allowed/venue** | TBA / 3 hour session day one / 30 minute session day two / microbiology laboratory |

## Part 1: Bacteria identification

To complete this part of the assessment, the student is required to participate in a practical demonstration of how to complete a task or activity.

These practicals will be observed by you, or the student can digitally record them and submit them as evidence.

The student’s responses will be used as part of the overall evidence requirements of the unit.

You should refer to the list of criteria provided in the Observation Checklist to understand what skills the student is required to demonstrate in this section of the assessment. This Checklist outlines the Performance Criteria, Performance Evidence and Assessment Conditions you will be marking the student on.

Once completed the student is required to submit this assessment and the tasks and activities required to be completed to you for marking.

**Task A:**

Your task is to successfully complete an identification of an unknown bacteria sample using a series of biological procedures to determine the species.

**To complete this task, you will be provided:**

* An unknown bacteria sample
* Standard operating procedure *M409: Bacterial classification and identification*
* Form *F409: Bacterial ID worksheet*
* The materials, reagents and tools required to successfully complete this task

1. Put on the correct personal protective equipment (PPE)
2. Follow *M409: Bacterial classification and identification* to complete the aseptic transfer.
3. Label all of your samples as per *M409: Bacterial classification and identification* and include the following details:
   1. Your surname
   2. Year
   3. Last 4 digits of your student number
4. Complete *F409: Bacterial ID worksheet*

## Part 2: Observation Checklist

The Observation Checklist will be used by you to mark the students’ performance in any of the previous three event types. Use this Checklist to understand what skills the student is required to demonstrate in this section of the assessment. This Checklist outlines the Performance Criteria, Performance Evidence and Assessment Conditions you will be marking the student on. All the criteria must be met. The student’s demonstration will be used as part of the overall evidence requirements of the unit. You may ask questions while the demonstration is taking place or if appropriate directly after the task/activity has been completed.

Table 2 Observation Checklist

| Part # | Task/Activity Performed | S | U/S | Assessor Comments  (Describe the student’s ability in demonstrating the required skills and knowledge) |
| --- | --- | --- | --- | --- |
| 1 | **PPE (Student must wear appropriate PPE at all times when conducting laboratory work):**   1. Student is wearing correct PPE for aseptic transfer |  |  | **Sample comment:**  Student is wearing glasses and lab coat, and has closed in shoes and long pants and sleeves. |
| 2 | **Bacterial identification**  Student has completed the following steps:   1. Colony morphology 2. Gram stain 3. Catalase reaction 4. Coagulase reaction 5. Haemolysis   Student has incubated sample   1. Student has completed parts 1 and 2 of the *F409: Bacterial ID worksheet* |  |  | **Sample comment:**  Colony morphology was correctly identified on worksheet.  Student heat fixed and successfully gram stained the sample (if a gram positive organism was used the organism must have stained purple and if gram negative then pink).  Catalase reaction was completed and logged.  Coagulase reaction was successful.  Worksheet has been completed up to haemolysis, and student incubated sample before leaving, as per benchmark response MSL974021\_MG\_Sk\_4of6\_SR1. |
| 3 | **Housekeeping**  Student has completed the following tasks:   1. Put biohazardous materials into correct disposal devices 2. Put recyclable materials into sterilising buckets |  |  | **Sample comment:**  Biohazardous materials were placed into correct receptacles (according to local laboratory requirements).  Recyclables were added to steriliser bucket. |
| Haemolysis observation is conducted on the day following incubation. This is to allow for 24 hours of incubation time for your media. | | | | |
| 4 | **Bacterial identification**  Student has completed the following steps:   1. Haemolysis 2. Student has completed part 3 of the *F409: Bacterial ID worksheet* |  |  | **Sample comment:**  Student has completed all tests and correctly identified bacterium provided.  Worksheet has been completed. |