# Skills assessment 1

**Assessment event 2 of 5**

# Trainer & Assessor Marking Guide

## Criteria

### Unit code, name and release number

MSL973019 - Perform microscopic examination (1)

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

MSL50118 - Diploma of Laboratory Technology (1)

MSL40118 - Certificate IV in Laboratory Techniques (1)

MSL30118 - Certificate III in Laboratory Skills (1)

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

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For queries, please contact:

Innovative Manufacturing, Robotics and Science SkillsPoint

Hamilton Campus

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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)

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## 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. Safe handling and pre-use safety check 2. Observation Checklist 3. Assessment feedback   **Task A: Safe handling of microscope – instructions for assessor**  Use an old / broken / out of service microscope for this task to avoid any potential damage to functional equipment.  The purpose of this task is to meet PC2.1. To set up, you could have two workstations close to each other to limit work health and safety (WHS) risks and have one student carry the microscope to one station, and the next student take it back to the first station and so on until all students have completed the task.  *Observation checklist*  *Item 1*  Watch the student carefully to make sure they don’t create a WHS risk for themselves. They must carry the microscope as specified in the standard operating procedure to limit the risk of both WHS issues and damage to the expensive equipment they are handling.  Reasonable adjustment: Students requiring reasonable adjustment can use a trolley to move the microscope from one station to the next.  **Task B: Pre-use safety check –** **instructions for assessor**  The same microscope can be used for this – it would be good for students to be able to identify errors / non-conformances. Otherwise, you could conduct this part within a normal microscopic laboratory session.  *Observation checklist*  *Item 2*  Make sure the student follows the safety check from steps 1-6 in order. You should observe them checking each part.  **Task C: Check lenses –** **instructions for assessor**  For this part, choose old / non-conforming equipment if possible. Keep a close eye on students to ensure they do not damage the objectives or eye pieces and that they use correct procedure to clean the lenses.  *Observation checklist*  *Item 3*  Make sure student DOES NOT use something that will damage the lenses.  Model answers, sample responses or a criteria for each task or activity is 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, appropriate clothing – long pants and sleeves, closed shoes and long hair tied back.  Personal protective equipment (PPE) – safety glasses and lab coat |
| **Assessor must provide** | Microscope, objectives, laboratory  Equipment and reagents listed in the following documents, as well as a copy of each per person attending the assessment event:  Standard Operating Procedure *M403: Compound light microscopy*  Form *F402: Prestart checklist microscopy*  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** | 30 minutes / microbiology laboratory |

## Part 1: Safe handling and pre-use safety check

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: Safe handling of microscope**

For this task, you will be required to safely carry the supplied microscope from one station to another.

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

* Standard operating procedure *M403: Compound light microscopy*
* A light microscope

**Step 1: Read**

1. Read section 6.2 of *M403: Compound light microscopy*

**Step 2: Complete task**

1. Let your assessor know you are ready to commence moving the microscope
2. Follow all steps in *M403: Compound light microscopy*, section 6.2 to successfully complete this task.
3. Your assessor will observe you throughout the process and complete item 1 of the observation checklist

**Task B: Pre-use safety checks**

For this task, you will be required to perform pre-use safety checks on a microscope.

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

* Standard operating procedure *M403: Compound light microscopy*
* Form *F402: Pre-use checklist microscopy*
* A light microscope

**Step 1: Read and review**

1. Read section 7.2 of *M403: Compound light microscopy*
2. Read *F402: Pre-use checklist microscopy*
3. Write your name on each page of *F402: Pre-use checklist microscopy*

**Step 2: Complete task**

1. Let your assessor know you are ready to commence the pre-use safety checks
2. Follow all steps in *M403: Compound light microscopy*, section 7.1 to successfully complete this task.
3. Your assessor will observe you throughout the process and complete item 2 of the observation checklist

**Task C: Check lenses**

For this task, you will be required to conduct maintenance of the microscope objectives and eye-pieces.

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

* Standard operating procedure *M403: Compound light microscopy*
* A light microscope
* Microscope wipes
* Alcohol
* Distilled water
* Soapy liquid

**Step 1: Read and review**

1. Read section 7.3 of *M403: Compound light microscopy*

**Step 2: Complete task**

1. Let your assessor know you are ready to commence checking the lenses
2. Follow all steps in *M403: Compound light microscopy*, section 7.2 to successfully complete this task.
3. Your assessor will observe you throughout the process and complete item 3 of the observation checklist

## 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 3 Observation Checklist

| Item # | Observation | S | U/S | Assessor Comments (Describe the student’s ability in demonstrating the required skills and knowledge) |
| --- | --- | --- | --- | --- |
| 1 | Student carries the microscope appropriately to ensure safety and prevent damage |  |  | Student lifted and carried as per *M403: Compound light microscopy*, section 6.2, by:  Lifting microscope, bending knees if needed, lifting straight up without bending body.  Holding microscope with one hand under base and the other hand on spine of microscope.  Carrying the microscope against body and placing gently on the bench. |
| 2 | Student performs a pre-use and safety check to ensure the microscope is fit for purpose |  |  | Student followed section 7.2 of *M403: Compound light microscopy* by:  Checking that the microscope is not plugged in (unplugging if required) and checking the power cord for any signs of damage and that the electrical safety tag is in date.  Ensuring the microscope is facing towards their body (if repositioning needed the student lifts the microscope rather than sliding it).  Checking that there are no loose or broken parts on the microscope.  Checking that the light works.  Form F402: Prestart checklist microscopy is completed correctly, according to the condition of the microscope. |
| 3 | Check the lenses and eyepiece to ensure they are clean before use |  |  | Student checked and cleaned lenses and eyepiece as per *M403: Compound light microscopy*, section 7.3 by:  Placing the objectives and eye pieces on a dust free surface.  Using a dust blower (if available).  Cleaning with distilled water and a using a cotton tip in a circular motion.  Cleaning with a solvent using a cotton tip in a circular motion.  Using detergent and cotton tip in a circular motion.  Wiping the objectives and eye pieces dry with a lens cloth.  Replacing the objectives and eye piece correctly back into the microscope. |