| **Title of Activity/Procedure: Micropipettes at home** | | | | | | | | | | | | | | **Is this assessment confidential?** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | | | | | | | | | | | | | |
| **Description of Activity (outline the task or experiment with words and formula if appropriate)** | | | | | | | | | | | | | | |
| Students will be supplied with micropipettes. They will then use basic equipment provided (e.g. plastic-ware such as microfuge tubes, micropipette tips, 96-well plates) along with food dyes (non-hazardous to humans or the environment) and water to make liquid dilutions.  The activity will be led and supervised by tutors. Students will complete the activity in small groups (7-9 students) in general purpose teaching rooms during week 10 tutorials. | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| **Who is exposed to this activity (Check Appropriate Boxes or describe):** | | | | | | | | | | | | | | |
| STAFF |  | POSTGRAD. | | |  | UNDERGRAD. | |  | VISITORS | |  | OTHER: | | |
|  | | | | | | | | | | | | | | |
| **Location of activity:** | | | | | **Frequency:** | | | | | | | | **Duration:** | |
| General purpose teaching rooms | | | | | Students to complete tasks in their own time | | | | | | | | Sept 2022 - May 2023 | |
|  | | | | | | | | | | | | | | |
| **Hazards To Health (for substances include volume, concentration or mass used):** | | | | | **Adverse Effects (injuries that could result from this activity – consider worst case scenario)** | | | | | | | | **Control Measures in place:** | |
| Pipetting - fitting pipette tip to micropipette  Strain, trips and falls  Use of common food stuff (food dyes) to make liquid solutions and dilutions | | | | | Spillages and minor injuries - due to incorrect technique  Personal injury, less than 20% strain in hands or shoulders  Risk of allergic reaction. | | | | | | | | Always hold the pipette close to the end to be inserted into the micropipette - do not use too much force. Students will be shown demonstrations of using micropipettes correctly  and will be instructed in the protocol and supervised in a small group.  Students will be warned to avoid any spills from liquid handling and keep the working area clean to avoid slipping or tripping. Students will be advised to use the supplied drip trays to avoid spillages.  Users are advised to avoid using micropipettes for more than 2 hours at a time to minimise any strain in hands or shoulders. Session will be 1 hour.  Students will be warned to check if they are allergic to the foodstuff. Students will be warned not to consume any part of this experiment or handle it on/around food intended for consumption. | |
| **If this activity involves chemicals, substances, high-risk work or equipment; are separate risk assessments, COSHH substance assessments, or local codes of practice in place?** | | | | | | | | | | | | | | |
| Chemical: | | |  | Biological/GM: | | |  | | | Other: |  | | List details & locations below: | |
| List any documentation and where it can be found in this box. | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| **If applicable, who will provide any necessary information, training or supervision for this activity?** | | | | | | | | | | | | | | |
| Jody Winter | | | | | | | | | | | | | | |
|  | | | | | | | | | | | | | | |
| **Emergency contact person (name and phone number):** | | | | | | | | | | | | | | |
| Jody Winter 0115 8486053 | | | | | | | | | | | | | | |

# **Overall Risk Severity Calculation: (see below for notes)**

| **Severity (S)** | **Probability (P)** | **Impact (I)** | **Score (SxPxI)** |
| --- | --- | --- | --- |
| **3** | **1** | **1** | **3** |

**Score = 1-3** No further action required.

**Score = 4-6** Identify additional control measures, reduce scale or substitute part of the activity for safer alternative. Work can proceed but action should be taken within a month, action should be described below.

**Score = 7-9** Work should not start unless additional control measures are in place. If activity is already in progress, action should be taken ASAP to reduce the risk. Additional actions should be described below.

**Score = 10+** Work must not start unless measures to reduce the risk are introduced.

**Are the risks adequately controlled? If not, specify action required below:**

|  |  |
| --- | --- |
| **Action (Can include training):** | **Timescale:** |
|  |  |

| **Assessed By:**  Jody Winter | **Signed: J Winter** | **Date:** 23/09/22 |
| --- | --- | --- |
| **\*Supervisor:** | **Signed:** | **Date:** |

\*Students should obtain a supervisors signature to approve the assessment

# **DECLARATION:**

I have read this Risk assessment and understand the risks and the measures that must be taken to control such risks.

| **NAME** | **SIGNATURE** | **DATE** |
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| **ASSESSMENT TO BE REVIEWED ANNUALY** |  |  |
| **REVIEWED BY** | **SIGNATURE** | **DATE** |
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**Scoring Risk Severity:** Consider all control measures in place and assess the risk associated with this task or activity.

**Severity:** 1= Injury could require first aid or could resulting brief absence from work.

2= Injury could result in hospital treatment or more than 3 days of work.

3= Injury could result in death or long term illness.

**Probability:** 1= Low; accident or injury will seldom occur.

2= Medium; accident or injury could occur occasionally.

3= High; accident or injury will occur frequently.

**Impact:** 1= Individual; Only single individual likely to be affected.

2= Group; Activity puts individuals in the vicinity at risk (room or lab)

3= Wide; Activity puts whole building or wide area of people at risk.