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|  | Physical Education Studies  General Year 11 Units 1 and 2  Task 3 Investigation 1 |
| **Assessment type** | Practical |
| **Conditions** | Time for the task: the assessment will be due by **Term 2 Week 4**. Students will have ample opportunities to demonstrate complete their task during class time. |
| **Task weighting** | 12.5% |
| **Total marks** | 43 marks |

Students need to produce individual assignments in their own words.

2 hours will be allocated in class, time outside of class will be permitted. It is the responsibility of the absent student to catch up on work outside of class time.

No extension will be given

* Unless student seek permission with a valid reason prior to due dates
* If students request an extension on due dates.
* If students are absent without a valid reason

Extensions will be decided on a case by case basis.

Late work: Students will be penalised 10% every school day including Wednesday until the assessment is handed in. If students submit their assessment over 5 school days late, they can only be penalised to a maximum of 50%. As per the Eastern Goldfields College Assessment Policy.

Students are encouraged to submit drafts before the submission date. There will not be any resubmissions after the due date.

**Part A**

1. Define the term Biomechanics

|  |  |
| --- | --- |
| **Description** | **Marks** |
| The study of motion1 and the effects of forces1 relative to the body. | 2 |
| **Total** | **/2** |

(2 marks)

1. List two benefits of biomechanics and how it improves sporting performance.

|  |  |
| --- | --- |
| **Description** | **Marks** |
| Choose 2 of the following   * Technique efficiency * Injury reduction through an understanding of injury causes and application of correct technique * Modification of sports equipment to improve sports performance at all levels   + - * E.g. Junior size equipment made lighter and easier to use       * E.g. Technological advancements in cricket bats, golf equipment, tennis racquet etc to improve power and accuracy * Technological development of equipment and computer technology to assist in transition from practice field to playing field   + - * E.g. Bowling machine in cricket       * E.g. Video software – Swinger, Dart Fish, Silicon Coach |  |
| **Total** | **/2** |

(4 marks)

1. Explain what force absorption is and how it prevents injuries

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * Forces exerted by the body are absorbed through bending at the knees when landing, bending at the elbows when catching the ball. * It prevents injury by increasing the time which the force is received. | 2 |
| **Total** | **/2** |

(2 marks)

1. Describe the terms: linear motion, angular motion and general motion

|  |  |
| --- | --- |
| **Description** | **Marks** |
| 2 marks each for full description, 1 mark for brief description   * Linear motion is motion in a perfectly straight line or curve with no rotation. * Angular motion takes place when an object turns about an axis of rotation. Occurs in a circular pattern. * Combination of angular motion to create linear motion. | 6 |
| **Total** | **/6** |

(6 marks)

**Part B**

1. Choose one of the following skills and identify the key teaching points for Preparation, Action & Follow Through for each stage.

* Dig
* Set
* Underarm Serve
* Block
* Spike

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * 1 mark for each phase  |  |  |  | | --- | --- | --- | | Preparation | Action | Follow through | | KTPs | KTPs | KTPs | | 3 |
| **Total** | **/3** |

(3 marks)

1. Using a video recording device, record your partner performing the skill and upload it onto the app **‘HUDL’**

Analyse your partner’s performance and identify 3 key teaching points for each phase that can be **a) improved** and/or **b) completed correctly.** *(Time will be given in class to use the app)*

Upload the frames to the template below with a brief explanation of how the key teaching points are being performed.

|  |  |  |
| --- | --- | --- |
| **Preparation** | **Action** | **Follow Through** |
| Analyzed Image | Analyzed Image | Analyzed Image |
| Explanation of KTPs | Explanation of KTPs | Explanation of KTPs |

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * 1 mark for each analyzed image * 1 mark for each KTP identified.  |  |  |  | | --- | --- | --- | | Preparation image | Action image | Follow through image | | KTPs | KTPs | KTPs | | 12 |
| **Total** | **/12** |

(12 marks)

1. Identify on the picture where linear, angular and general motion occurs and give a brief explanation of how the motion is occurring.

|  |  |  |
| --- | --- | --- |
| **Linear** | **Angular** | **General** |
| *Analyzed Image* | *Analyzed Image* | *Analyzed Image* |
| Explanation of Linear Motion: | Explanation of Angular Motion: | Explanation of General Motion: |

|  |  |
| --- | --- |
| **Description** | **Marks** |
| * 1 mark for each analyzed image * 1 mark for identifying where motion occurs * 1 mark for explaining how it occurs  |  |  |  | | --- | --- | --- | | Linear image | Angular Image | General Image | | Identifying Linear Motion:  Explanation of Linear Motion | Identify Angular Motion:  Explanation of Linear Motion | Identify General Motion:  Explanation of Linear Motion | | 9 |
| **Total** | **/9** |

(9 marks)

1. State how your chosen skill places stress on the body and what type of load is occurring. Choose a common injury associated and explain the guidelines to prevent the injury.

|  |  |
| --- | --- |
| **Description** | **Marks** |
| States an injury **(1 mark)**  Choose a skill and how it places stress - **(1 mark)**  Example:   * Spike – producing high force through the shoulder/elbow * Serve – producing high foce through hand/fingers/wrist * Block – High force on ankles when landing / finger injuries   States correct type of load **(1 mark)**  **Provides two guidelines (2 marks)**   1. **High Repetition, Moderate Force Activities**  * Dig * Set   Guidelines:   * Appropriate warm up and cool-down * Incorporate specific flexibility and muscle endurance training * Correct technique * Increase training load gradually * Varying training * Monitoring the number of repetitions in both training and competitive performance * Wearing appropriate footwear   **2. High force, Moderate Repetition Activities**   * Spike * Serve   **Guidelines:**   * Warm up and Cool-down * Correct technique – using specific practices and lead up drills * Limiting the number of repetitions (in training and competition) * Using specialised equipment (e.g appropriate floor surfaces or matting, mouth guards) * Observing specific safety precautions * Varying training in order to spread the load to different areas of the body * Physically preparing in regards to physiological capacities such as flexibility, strength, power and so on. | 9 |
| **Total** | **/9** |

(5 marks)

**Task 3 Marking Key**

**General PES**

**Investigation 1**

|  |  |  |  |
| --- | --- | --- | --- |
| **Question** | **Description** | **Allocated Marks** | **Student Marks** |
| **Part A** | | | |
| 1 | * Define the term Biomechanics | 2 |  |
| 2 | * Lists 2 benefits (1 mark each; 2 marks total) * Explain how it improves sporting performance for each benefit (1 mark each; 2 marks total) | 4 |  |
| 3 | * Explains force absorption (1 mark) * Explains how it prevents injury (1 mark) | 2 |  |
| 4 | * Full description of linear, angular and general motion (2 marks each ; 6 marks total) * Brief description of linear, angular and general motion (1 mark each) | 6 |  |
| **Part B** | | | |
| 1 | * Identifies Key Teaching Points for chosen skill in correct stage; Preparation, Action & Follow Through (1 mark each; 3 marks total) | 3 |  |
| 2 | * Analysis of each image for each phase | 3 |  |
| * Explanation of KTPs for Preparation phase   (1 mark each; 3 marks total) | 3 |  |
| * Explanation of KTPs for Action phase * (1 mark each; 3 marks total) | 3 |  |
| * Explanation of KTPs for Follow Through phase * (1 mark each; 3 marks total) | 3 |  |
| 3 | * Motion identified on each picture | 3 |  |
|  | * Identifies Linear Motion (1 mark) * Explains where linear motion occurs (1 mark) | 2 |  |
|  | * Identifies Angular Motion (1 mark) * Explains where Angular motion occurs (1 mark) | 2 |  |
|  | * Identifies General Motion (1 mark) * Explains where General motion occurs (1 mark) | 2 |  |
| 4 | * States an injury (1 mark) * Explains how stress is caused (1 mark) * States correct type of load (1 mark) * Provides 2 guidelines (2 marks) | 5 |  |
| Total Marks: | | 43 |  |