# DP unit planner 1

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Teacher(s)** | Adam Lerch | **Subject group and course** | Biology HL | | |
| **Course part and topic** | Topic 11 | **SL or HL/Year 1 or 2** | HL Year 1 | **Dates** | Term 2 or 3 |
| **Unit description and texts** | | **DP assessment(s) for unit** | | | |
| Physiology IB Biology Course Companion | | Papers 1 & 2, Practical work | | | |

***INQUIRY: establishing the purpose of the unit***

|  |
| --- |
| **Transfer goals**  *List here one to three big, overarching, long-term goals for this unit. Transfer goals are the major goals that ask students to “transfer” or apply, their knowledge, skills, and concepts at the end of the unit under new/different circumstances, and on their own without scaffolding from the teacher.* |
| Candidates become familiar with some of the demands of HL Biology. Candidates become familiar with fairly detailed information about human physiology. Candidates are able to apply knowledge from SL studies (e.g. osmosis) into examples found in the HL syllabus (e.g. reabsorption in kidneys). |

***ACTION: teaching and learning through inquiry***

|  |  |  |  |
| --- | --- | --- | --- |
| **Content/skills/concepts—essential understandings** | | **Learning process**  *Check the boxes for any pedagogical approaches used during the unit. Aim for a variety of approaches to help facilitate learning.* | |
| Students will know the following content:  How muscle tissue works  How muscle cells work  How kidneys work  Students will develop the following skills:  Identifying nephrons under microscopic slides  Predicting concentrations of substances found in excreted products  Biological drawings  Students will grasp the following concepts:  Evolution of nitrogenous waste removal has resulted in several outcomes  Sliding filament theory is a good example of how we know things in science even if we cannot necessarily directly view them | | **Learning experiences and strategies/planning for self-supporting learning:**  Lecture  Socratic seminar  Small group/pair work  PowerPoint lecture/notes  Individual presentations  Group presentations  Student lecture/leading  Interdisciplinary learning  Details:  Other/s: | |
| **Formative assessment:**  **Data based questions in book**  **InThinking worksheets**  **Teacher worksheets**  **Discussions during laboratory exercises** | |
| **Summative assessment:**  **Exam questions from previous papers 1 & 2** | |
| Differentiation:  Affirm identity—build self-esteem  Value prior knowledge  Scaffold learning  Extend learning  Details: | |
| **Approaches to learning (ATL)**  *Check the boxes for any explicit approaches to learning connections made during the unit. For more information on ATL, please see* [*the guide*](http://ibpublishing.ibo.org/dpatl/guide.html)*.* | | | |
| Thinking  Social  Communication  Self-management  Research  Details: | | | |
| **Language and learning**  *Check the boxes for any explicit language and learning connections made during the unit. For more information on the IB’s approach to language and learning, please see* [*the guide*](http://ibpublishing.ibo.org/dpatl/guide.html)*.* | **TOK connections**  *Check the boxes for any explicit TOK connections made during the unit* | | **CAS connections**  *Check the boxes for any explicit CAS connections. If you check any of the boxes, provide a brief note in the “details” section explaining how students engaged in CAS for this unit.* |
| Activating background knowledge  Scaffolding for new learning  Acquisition of new learning through practice  Demonstrating proficiency  Details: | Personal and shared knowledge  Ways of knowing  Areas of knowledge  The knowledge framework  Details: Sliding filament theory is a good example of how we know things in science even if we cannot necessarily directly view them. | | Creativity  Activity  Service  Details: |
| **Resources**  *List and attach (if applicable) any resources used in this unit* | | | |
|  | | | |

***Stage 3: Reflection—considering the planning, process and impact of the inquiry***

|  |  |  |
| --- | --- | --- |
| **What worked well**  *List the portions of the unit (content, assessment, planning) that were successful* | **What didn’t work well**  *List the portions of the unit (content, assessment, planning) that were not as successful as hoped* | **Notes/changes/suggestions:**  *List any notes, suggestions, or considerations for the future teaching of this unit* |
|  |  |  |