# DP unit planner 1

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| **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***

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| **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***

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| **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 worksHow muscle cells workHow kidneys workStudents will develop the following skills:Identifying nephrons under microscopic slidesPredicting concentrations of substances found in excreted productsBiological drawingsStudents will grasp the following concepts:Evolution of nitrogenous waste removal has resulted in several outcomesSliding 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 learningDetails: [ ] 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 learningDetails: |
| **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[ ] ResearchDetails:  |
| **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 proficiencyDetails: | [ ] Personal and shared knowledge[ ] Ways of knowing[ ] Areas of knowledge[ ] The knowledge frameworkDetails: Sliding filament theory is a good example of how we know things in science even if we cannot necessarily directly view them. | [ ] Creativity[ ] Activity[ ] ServiceDetails:  |
| **Resources***List and attach (if applicable) any resources used in this unit* |
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***Stage 3: Reflection—considering the planning, process and impact of the inquiry***

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| **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* |
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