# DP unit planner 1

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| **Teacher(s)** | Adam Lerch, Niko Kaikkonen | **Subject group and course** | Biology SL & HL | | |
| **Course part and topic** | IA | **SL or HL/Year 1 or 2** | SL & HL Year 2 | **Dates** | Term 2 or 4 |
| **Unit description and texts** | | **DP assessment(s) for unit** | | | |
| IB Biology Course Companion | | IA assessment | | | |

***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 spend approximately three weeks’ worth of lessons (10 hours) working on the practical side of their IAs. This is followed by drafting a report, receiving feedback on the draft and finally composing and submitting a final IA report.  The candidates may have to transfer all sorts of skills acquired during the studies up to now, including the practical use of laboratory equipment, use of computing software and online information retrieval, to name a few.  Candidates will need to transfer theoretical concepts into practical means for carrying out the IA. |

***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:  What is required for the IA investigation and reporting.  The important concepts of their own personal investigations.  The important theoretical background information related to their own personal investigations.  The important practical skills needed to carry out the investigation.  Students will develop the following skills:  Laboratory technique skills.  Skills involved in the academic writing process.  Students will grasp the following concepts:  The connection between the theoretical and practical in the natural sciences.  Communication (Writing in academic voice)  Cycles: (Writing and revision).  Citations and Referencing.  \*\*All of these skills will have already been practiced during the EE process.  The connection between theory and practice.  As each student carries out their own IA practical work on a chosen topic, the concepts may vary considerably. | | **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:**  **This will primarily take place in the form of a commenting on the initial research question / plan, face to face feedback and discussions as the practical work is being carried out, face to face feedback sessions with all students based on their report drafts.** | |
| **Summative assessment:**  **The IA assessment and its moderation.** | |
| 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: Social approaches may not play such a key role here but are nonetheless important, as all candidates will be working on the IA simultaneously, and many of them will be working in the laboratory simultaneously. There will likely arise situations where candidates need to wait for equipment, communicate with each other on using certain equipment, take care that they give each other sufficient space, etc. | | | |
| **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* | | | |
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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* |
|  |  | This unit seems to work best in Term 2 of DP 2. |