# DP unit planner 1

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| **Teacher(s)** | Adam Lerch | **Subject group and course** | Group IV, Chemistry | | |
| **Course part and topic** | Topics 7-9, 17-19: Equilibrium, Acids & Bases, Redox | **SL or HL/Year 1 or 2** | 2 | **Dates** | Fall semester, year 3IB |
| **Unit description and texts** | | **DP assessment(s) for unit** | | | |
| Oxford Chemistry Course Companion | |  | | | |

***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.* |
| Students should be able to transfer the knowledge that many reactions of acids & bases and redox processes are reversible, and equilibrium shift can be influenced by chemists.  Students should be able to recognize the environmental issues brought up in these topics (battery and energy production, acid deposition, ozone chemistry, etc. |

***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:  The content as described in the Chemistry Subject Guide.  Students will develop the following skills: Laboratory techniques, such as further development of titration skills, the use of indicators and digital pH meters, skills related to electrochemistry in the laboratory.  Students will grasp the following concepts: | | **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: Laboratory / Practical work | |
| **Formative assessment:**  **Quizzes at the end of each topic or even sub topic. The sources of these questions are the book and from InThinking.** | |
| **Summative assessment:**  **Examination to be held after Term 2, year 3IB. Other summative assessments will be the Mock Exams and the Final Examinations.** | |
| 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: The amount of practical laboratory work is notable for these topics, so working with a lab partner(s) will require good social and communication skills especially. | | | |
| **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: We all have experience with batteries, and we all experience acids and bases in our daily lives. The different definitions of acids and bases show that certain ways of knowing are broader in scope than others. | | Creativity  Activity  Service  Details: |
| **Resources**  *List and attach (if applicable) any resources used in this unit* | | | |
| **Same as usual: coursebook, InThinking, Peda.net, and several web pages.** | | | |

***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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