**Victoria Park Collegiate Institute IB Physics Internal Assessment**

The internal assessment is an integral part of the course and is compulsory for both SL and HL students. It enables students to demonstrate the application of their skills and knowledge, and to pursue their personal interests, without the time limitations and other constraints that are associated with written examinations. \* (From the IB IA Physics Guide)

This is a 10 hour investigation that results in a scientific paper that is 6-12 pages in length…but don’t worry you are not alone! Although the IA has to be your own work, the teacher plays an important role throughout the process. Teacher guidance and consultation should be part of the process while deciding on a topic, planning the IA and writing the first draft.

**Topic Selection**

It is best if you select a topic in physics that you are interested in. This will help you stay focused and inspired. Note (From the IB IA Physics Guide): the teacher can suggest possible topics and approaches to formulating questions but cannot allocate specific research questions to study. You will also need to decide if you are going to conduct a hands on investigation (could include video analysis), use databases, use simulations or a hybrid of these options.

To see a list of suggested topics, equipment, databases and simulations you can check out Chris Hamper’s website at <http://www.thinkib.net/physics/page/16194/ideas-for-investigations>. This list should be considered as a jumping off point for your investigation if you are having difficulty getting started in your own research.

**Investigation**

Once your topic has been approved and you have a **focused research question**, you can plan and conduct your investigation. No investigation should be conducted solely at home (this includes investigations that use secondary sources such as simulations). Class time will be allotted for the *action* stage of the IA. This allows the teacher to provide guidance and verify the authenticity of your work.

When planning the investigation make sure you:

* Provide a detailed equipment/material list a few days before the investigation.
* Plan an investigation that considers all relevant safety issues.
* Plan an investigation that appropriately addresses your research question.

**Report**

The final report is worth 20% of your IB Physics mark. Refer to the [IB rubric](https://ibpublishing.ibo.org/server2/rest/app/tsm.xql?doc=d_4_physi_gui_1402_1_e&part=9&chapter=5) and Physics checklist for further detail about writing the report.

When in the report writing stage you should remember that

* It should be no more than 12 pages.
* The first draft is to be handed into the teacher for preliminary feedback.
* The final draft must be verified for authenticity.
* It should include sufficient detail for the investigation to be repeated independently.
* All references need to be appropriately cited.
* It will be assessed using the following criteria.

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| --- | --- | --- | --- | --- | --- |
| Personal Engagement | Exploration | Analysis | Evaluation | Communication | Total |
| 2 (8%) | 6 (25%) | 6 (25%) | 6 (25%) | 4 (17%) | 24 (100%) |

Time Management

The investigation should take approximately 10 hours.

This will include:

* time for the teacher to explain to students the requirements of the internal assessment
* time for consultation between the teacher and each student
* time to complete the investigative work
* time to review and monitor progress and to check authenticity.

You will also have to plan for the report writing stage and potentially more time for the *action* stage of your investigation.

Important Dates

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| **Phase** | **Date** |
| In class introduction to the project, (Q&A) | September 16th 2015 |
| Individual student-teacher topic selection meeting | September 23rd-25th 2015 |
| Final research question/plan submission (1 page) | October 2nd 2015 |
| Initial investigation (*action*) hour | October 5th or 6th 2015 |
| Additional investigation time | October 14th-27th 2015 |
| First draft to teacher | November 8th 2015 |
| Final paper submitted (turnitin.com) | November 19th 2015 |