



Subject Course Outline

IB Mission Statement

The International Baccalaureate aims to develop inquiring, knowledgeable and caring young people who help to create a better and more peaceful world through intercultural understanding and respect.

To this end the organization works with schools, governments and international organizations to develop challenging programmes of international education and rigorous assessment.

These programmes encourage students across the world to become active, compassionate and lifelong learners who understand that other people, with their differences, can also be right.

Bladins International School Mission Statement

The mission of Bladins International School is to fully develop the student's intellectual, aesthetic, emotional, physical and moral potential and, as a school, serve as an example of educational excellence.

Teaching and Learning within the Middle Years Programme at Bladins

The Middle Years Programme is designed to challenge teenagers in a number of ways. As part of the Middle Years Programme the students at Bladins IS are given an awareness of the ever changing world through a challenging and demanding curriculum, fostering an appreciation and a love for learning. The curriculum at Bladins IS enables students to make connections between the subjects and the concepts taught, in context of today's world.

Together with the IB Learner Profile attributes <http://www.ibo.org/en/benefits/learner-profile/>, our students are encouraged to inquire, take action and reflect on their learning. Through a conceptual approach to teaching and learning students are taught how to view subject content through a variety of frameworks and make associations between subjects.

The programme allows students to build on their personal strengths and to embrace challenges in subjects in which they might not excel. The MYP offers students opportunities to develop their potential, to explore their own learning preferences, to take appropriate risks, and to reflect on, and develop, a strong sense of personal identity. (MYP:From Principles into Practice, 2014)

Aims of the Design Course at Bladins International School

The aims of the teaching and learning of MYP DESIGN. are to encourage and enable students to:

- ◆ enjoy the design process, develop an appreciation of its elegance and power
- ◆ develop knowledge, understanding and skills from different disciplines to design and create solutions to problems using the design cycle
- ◆ use and apply technology effectively as a means to access, process and communicate information, model and create solutions, and to solve problems
- ◆ develop an appreciation of the impact of design innovations for life, global society and environments
- ◆ appreciate past, present and emerging design within cultural, political, social, historical and environmental contexts
- ◆ develop respect for others' viewpoints and appreciate alternative solutions to problems
- ◆ act with integrity and honesty, and take responsibility for their own actions developing effective working practices.

MYP Objectives

| A: | MYP 3 | MYP 5 |
|--|--|--|
| MYP 1 | MYP 3 | MYP 5 |
| <i>At the end of the first year, students should be able to:</i> | <i>At the end of the third year, students should be able to:</i> | <i>At the end of the fifth year, students should be able to:</i> |
| i. explain and justify the need for a solution to a problem | i. explain and justify the need for a solution to a problem | i. explain and justify the need for a solution to a problem for a specified client/target audience |
| ii. state and prioritize the main points of research needed to develop a solution to the problem | ii. construct a research plan, which states and prioritizes the primary and secondary research needed to develop a solution to the problem | ii. identify and prioritize primary and secondary research needed to develop a solution to the problem |
| iii. describe the main features of one existing product that inspires a solution to the problem | iii. analyse a group of similar products that inspire a solution to the problem | iii. analyse a range of existing products that inspire a solution to the problem |
| iv. present the main findings of relevant research. | iv. develop a design brief, which presents the analysis of relevant research. | iv. develop a detailed design brief, which summarizes the analysis of relevant research. |

| B: | MYP 3 | MYP 5 |
|---|--|--|
| MYP 1 | MYP 3 | MYP 5 |
| <i>At the end of the first year, students should be able to:</i> | <i>At the end of the third year, students should be able to:</i> | <i>At the end of the fifth year, students should be able to:</i> |
| i. develop a list of success criteria for the solution | i. develop a design specification which outlines the success criteria for the design of a solution based on the data collected | i. develop design specifications, which clearly states the success criteria for the design of a solution |
| ii. present feasible design ideas, which can be correctly interpreted by others | ii. present a range of feasible design ideas, which can be correctly interpreted by others | ii. develop a range of feasible design ideas, which can be correctly interpreted by others |
| iii. present the chosen design | iii. present the chosen design and outline the reasons for its selection | iii. present the chosen design and justify its selection |
| iv. create a planning drawing/diagram which outlines the main details for making the chosen solution. | iv. develop accurate planning drawings/diagrams and outline requirements for the creation of the chosen solution. | iv. develop accurate and detailed planning drawings/diagrams and outline the requirements for the creation of the chosen solution. |

| C: | MYP 3 | MYP 5 |
|--|---|--|
| MYP 1 | MYP 3 | MYP 5 |
| <i>At the end of the first year, students should be able (with modifications) to:</i> | <i>At the end of the third year, students should be able (in more complex activities) to:</i> | <i>At the end of the fifth year, students should be able to:</i> |
| i. outline a plan, which considers the use of resources and time, sufficient for peers to be able to follow to create the solution | i. construct a logical plan, which outlines the efficient use of time and resources, sufficient for peers to be able to follow to create the solution | i. construct a logical plan, which describes the efficient use of time and resources, sufficient for peers to be able to follow to create the solution |
| ii. demonstrate excellent technical skills when | ii. demonstrate excellent technical skills when | ii. demonstrate excellent technical skills when |

| | | |
|--|---|---|
| making the solution | making the solution | making the solution |
| iii. follow the plan to create the solution, which functions as intended | iii. follow the plan to create the solution, which functions as intended | iii. follow the plan to create the solution, which functions as intended |
| iv. list the changes made to the chosen design and plan when making the solution | iv. explain changes made to the chosen design and the plan when making the solution | iv. fully justify changes made to the chosen design and plan when making the solution |
| v. present the solution as a whole. | v. present the solution as a whole. | v. present the solution as a whole. |

| D: | | |
|--|---|--|
| MYP 1 | MYP 3 | MYP 5 |
| <i>At the end of the first year, students should be able to:</i> | <i>At the end of the third year, students should be able to:</i> | <i>At the end of the fifth year, students should be able to:</i> |
| i. outline simple, relevant testing methods, which generate data, to measure the success of the solution | i. describe detailed and relevant testing methods, which generate accurate data, to measure the success of the solution | i. design detailed and relevant testing methods, which generate data, to measure the success of the solution |
| ii. outline the success of the solution against the design specification | ii. explain the success of the solution against the design specification | ii. critically evaluate the success of the solution against the design specification |
| iii. outline how the solution could be improved | iii. describe how the solution could be improved | iii. explain how the solution could be improved |
| iv. outline the impact of the solution on the client/target audience. | iv. describe the impact of the solution on the client/target audience. | iv. explain the impact of the solution on the client/target audience. |

Design topics include:

Design units and activities in MYP 1 through to MYP 5 have been set in such a way that they allow students to develop their skills in the fields of Product Design and Digital Design. Every year of the programme, students take both Product Design and Digital Design, one each term. This allows students be proficient in creating computer-generated digital products/solutions as well as manipulating a variety of materials to create tangible products/solutions to solve problems and meet specific needs.

The taught and assessed curriculum in each year of Design throughout MYP1-5 may include:

| | |
|---------------------------|---|
| Image/Video/Audio Editing | Use of a variety of resistant materials in Design |
| Website Authoring | Ergonomic design |
| Video Game Design | Inclusive design |
| Programming | Interior Design |

Assessment in Design

Assessment is intended as an extension of the learning process for students, and this course gives students many different ways to demonstrate their understanding and skills. As students follow the Design Cycle, they document their projects as per the official assessment criteria. The development of this documentation is carried out in different forms which may include writing, sketching, developing 2D or 3D models and others.

In MYP 1 through MYP 5 student achievement in Design is assessed against the following four criteria:

- Inquiring and Analysing:** Students are presented with a design situation, from which they identify a problem that needs to be solved. They analyse the need for a solution and conduct an inquiry into the nature of the problem.
- Developing ideas:** Students write a detailed specification, which drives the development of a solution. They present the solution.
- Creating the solution:** Students plan the creation of the chosen solution and follow the plan to create a prototype sufficient for testing and evaluation.
- Evaluating :** Students design tests to evaluate the solution, carry out those tests and objectively evaluate its success. Students identify areas where the solution could be improved and explain how their solution will impact on the client or target audience.

Students achieve a level from 0-8 in each criterion and these are added together to calculate the final overall achievement level in sciences using the following table.

| <i>Final achievement Level</i> | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|--------------------------------|------------|------------|--------------|--------------|--------------|--------------|--------------|
| <i>Total mark/32</i> | 1-5 | 6-9 | 10-14 | 15-18 | 19-23 | 24-27 | 28-32 |