Celebration IB Mathematics Courses

Before you read beyond this point, please keep this in mind:
Universities want high school students to take the most rigorous Math course possible, that they can be successful at. Success in this case is considered end of course A's and B's.

IB Math Pathways:
- IB Math courses require Algebra II Honors as a prerequisite.
- After Algebra II Honors, students choose between two IB math course pathways:
  - **Math Applications and Interpretation -** offered at the SL (2 year) level.
  - **Math Analysis and Approaches -** offered at both the SL (2 year) and HL (3 year) levels.

	9th Grade	10th Grade		11th Grade	12th Grade
Group 5: Mathematics*	Geometry Honors *if Algebra 1 credit obtained*	Algebra 2 Honors	SL	IB Applications and Interpretations 1 SL	IB Applications and Interpretations 2 SL
				IB Analysis and Approaches 1 SL	IB Analysis and Approaches 2 SL
	Algebra 2 Honors *Algebra 1 and Geometry credit obtained*	Analysis and Approaches 1 SL	SL	IB Analysis and Approaches 2 SL	*AP Math Elective*
		IB Analysis and Approaches 1 HL	HL	AP Calculus	IB Analysis and Approaches 3 HL
		Analysis and Approaches 1 SL	SL	IB Applications and Interpretations 2 SL	*AP Math Elective*

Mathematics Applications and Interpretations (Math AI): This course is designed for students who enjoy describing the real world and solving practical problems using mathematics, those who are interested in harnessing the power of technology alongside exploring mathematical models and enjoy the more practical side of mathematics.
- Emphasis on modelling and statistics
- Develops strong skills in applying mathematics to the real-world
- Real mathematical problem-solving using technology.
- These students benefit from a solid review of Algebra II honors and may be focused on careers that are non-stem related but maybe have statistical components.
- ***For students interested in social sciences, natural sciences, statistics, medical, business, psychology and design in college.***

Mathematics Analysis and Approaches (Math AA): This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content; it is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology.
- Emphasis on algebraic methods
- Develop strong skills in mathematical thinking.
- Real and abstract mathematical problem solving
- ***For students interested in mathematics, medicine, engineering, physics, physical sciences, some business and economics in college.***

- If you are considering majoring in Engineering or Mathematics in college, you will want to consider IB Math AA Higher Level. You will need to be in IB Analysis $ Approaches 1 or higher in 10th grade.

IB Analysis and Approaches			IB Applications and Interpretation		
Emphasis on calculus			Emphasis on statistics, modeling, and using technology		
Recommended Teaching Hours Percentages:			Recommended Teaching Hours Percentages:		
	SL	HL		SL	HL
Number and Algebra	13%	16%	Number and Algebra	11%	12%
Functions	14%	13%	**Functions**	**21%**	**18%**
Geometry and Trigonometry	**17%**	**21%**	Geometry and Trigonometry	12%	18%
Statistics and Probability	17%	14%	**Statistics and Probability**	**24%**	**23%**
Calculus	**19%**	**23%**	Calculus	12%	16%
Exploration	20%	13%	Exploration	20%	13%
*40% of the SL content across both pathways is the same					

Addition Website to Help Explain the Changes: https://blogs.ibo.org/blog/2019/06/20/mathematics-subject-breakdown/