

Course Outline

Technology: Computers

MYP Level 1

I. Course description

The level-one computer course at Merrill Middle School provides students the opportunity to respond to real-life challenges through the use of technology. Throughout the course, students will apply critical-thinking skills to creatively solve problems. They will also gain an understanding of how technology impacts our lives on both a local and global scale.

Students will work on improving their keyboarding skills while working with computer applications and technology operations. They will also research and study internet safety and digital citizenship as focus points.

This course incorporates the three fundamental *concepts of the International Baccalaureate (IB) Middle Years Programme (MYP): holistic learning, intercultural awareness and communication*. *Holistic learning* is emphasized in this course when students solve real-world problems that require them to draw from a variety of disciplines. *Intercultural awareness* is encouraged by allowing students to consider multiple perspectives by exploring various social, national, and ethnic cultures. *Communication* is highlighted as students express their ideas and show evidence of their learning about real-world concepts and issues.

Students will begin to embody the IB Learner Profile as they display a(n):

- **Inquiring** approach to their learning.
- Approach that suggests they are **knowledgeable** and reasoned in their **thinking**.
- Ability to **communicate** their ideas and receive the ideas of others.
- Honest, fair, and **principled** approach to their behavior and learning.
- **Open - mindedness** toward others' attitudes and beliefs.
- Empathy, compassion, and **caring** for others.
- Willingness to leave their comfort zone and become **risk-takers**.
- **Balance** in all aspects of their lives.
- Ability to **reflect** on life and learning.

II. Aims and objectives

Please refer to Merrill's website to view the MYP objectives.

Aims

- 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.

Objectives

The MYP uses the design cycle as a model. It is intended to be the central tool to help students to create and evaluate products/solutions in response to challenges. The MYP technology design cycle consists of four major stages, and these relate to the objectives of the course. The four stages are as follows:

- Inquiring and Analyzing
 - Students identify the problems to be solved.
- Developing Ideas
 - Students design the products/solution.
- Creating the Solution
 - Students use appropriate techniques and equipment.
- Evaluate
 - Students evaluate the product/solution.

III. Global Context

Global contexts direct learning towards independent and shared inquiry into our common humanity and shared guardianship of the planet. Using the world as the broadest context for learning, MYP design can develop meaningful explorations of:

- identities and relationships
- orientation in space and time
- personal and cultural expression
- scientific and technical innovation
- globalization and sustainability
- fairness and development.

IV. Texts and Resources

Materials and programs used in this course include Microsoft Office along with DMPS supplied textbooks and software programs.

V. Methodology

Students will be actively involved in their own learning. A variety of engaging experiences will include: teacher directed instruction and activities, leveled instruction and activities and project based learning.

VI. Methods of Assessment

Formative assessments will include class work, class discussions, self evaluations, peer evaluations, teacher observation, and quizzes.

Summative assessments will include finalized projects, unit reflections, presentations, teacher created tests and district assessments.

For IB assessment, student work is evaluated on the following IB assessment criteria:

Criterion A: Inquiring and Analyzing	(Max 8)
Criterion B: Developing Ideas	(Max 8)
Criterion C: Creating Ideas	(Max 8)
Criterion D: Evaluating	(Max 8)

VII. Grading Policy/MYP Criteria

All summative tasks will be assessed using MYP rubrics, and students will receive a copy of the rubrics to take home. Further, teachers will post each student's level of achievement on Infinite Campus.