IB Middle Years Program Year 4 Design
9th Grade Willows Preparatory School

Course Description:
Design is the link between innovation and creativity, taking thoughts and exploring possibilities and constraints associated with products or systems, allowing students to redefine and manage the creation of further thought through prototyping, experimentation, and adaptation.

Inquiry and problem-solving are at the heart of MYP Design. MYP design requires the use of the design cycle as a tool, which provides the methodology used to structure the inquiry and analysis of problems, the development of feasible solutions, the creation of solutions, and the testing and evaluation of the solution. In MYP design, a solution can be defined as a model, prototype, product, or system that students have developed and created independently.

MYP Design expects all students to become actively involved in, and to focus on, the whole design process rather than on the final product/solution. MYP design courses help specifically to prepare students for the study of computer science, design technology and information technology in a global society (ITGS) in the Diploma Programme (DP).

MYP Year 4 (9th Grade) Teaching and Learning Experiences
- Students explore identified, real-life problems set in familiar and unfamiliar contexts.
- Students design products for familiar groups of people.
- Students focus on advanced skill development through projects and short, focused tasks.
- Students can manage their own work organizing their time and work appropriately.
- Students utilize the teacher as a guide and advisor.

Student Learning Outcomes:
Inquiry and Analyzing
- explain and justify the need for a solution to a problem
- construct a research plan, which states and prioritizes the primary secondary research needed to develop a solution to the problem
- analyze a group of similar products that inspire a solution to the problem
- develop a design brief, which represents the analysis of relevant research

Developing Ideas
- develop a design specification which outlines the success criteria for the design of a solution based on the data collected
- present a range of feasible design ideas, which can be correctly interpreted by others
- present the chosen design and outline the reasons for its selection
- develop accurate planning drawings/diagrams and outline the requirements for the creation of the chosen solution

Creating the Solution
- construct a logical plan, which outlines the efficient use of resources and time, sufficient for peers to be able to follow to create the solution
- demonstrate excellent technical skills when making the solution
- follow the plan to create the solution, which functions as intended
- explain changes made to the chosen design and the plan when making the solution

Evaluating
- describe detailed and relevant testing methods, which generate accurate data, to measure the success of the solution
- explain the success of the solution against the design specifications
- describe how the solution could be improved
- describe the impact of the solution on the client/target audience

Course Schedule Outline:
      Semester 1
- Digital Citizenship/Ethics in Design
- Design Challenge

      Semester 2
- Autonomous Car
- Python

Homework:

In general, homework is not assigned in MYP Design. Most work done at home will be collecting materials in preparation for the next class.

WPS Assessment Types:

For a detailed description of the Assessment Policies, please see the assessment Policy Handbook the WPS website.

Willows Preparatory School teachers create and implement both formative and summative assessments, both of which are related to each other and integral to the learning process.

Formative Assessment (20% of semester grade) – assessments that provide smaller amounts of feedback on specific learning objectives and/or require students to demonstrate their knowledge of specific targeted aims in order to drive future instruction (e.g. at WPS: lesson exit ticket, daily warm-ups, comprehension quizzes, etc.).

Summative Assessment (80% of semester grade)– assessments that are designed to provide evidence for evaluating student achievement using required MYP subject-group specific assessment criteria (e.g. at WPS: written assessments, projects, presentation, performances, etc.).

Assignment Submission Guidelines:
      Files
1. All work is submitted in ManageBac, I do not accept submissions anywhere else
2. Files cannot be JPG's
3. Files must be named with name or initials and name of assignment/submission
   a. Ex. JG_unit3_conceptmap.pdf

      Late Work
YOU MUST NOTIFY ME THROUGH EMAIL when you have submitted late work or revised work
      a. YOU MUST PUT 'LATE WORK' IN THE SUBJECT LINE
      b. YOU MUST STATE WHAT ASSIGNMENT WAS SUBMITTED IN THE EMAIL
      c. I usually don't respond to Late Work emails, they are like a checklist for me to use when grading

Tests/Quizzes:
- In general, tests and quizzes will be in the form of projects and check-ins.

Missing Class:
1. If you are missing class, please notify me through email to ask for work you're missing.
2. It is your responsibility to ask about and complete work you have missed.
3. Please ask for help if you are uncertain about the concepts or need assistance!

Student Conduct:

To maintain a safe and enjoyable time at school, students are expected to behave in a responsible manner. Violations of student conduct expectations may result in disciplinary measures, which are explained later in this document.
The following are expectations of all WPS students:

- Always demonstrate courteous and respectful behavior, including with use of school equipment/property and other people's belongings
- Follow staff instructions promptly
- Arrive to class fully equipped, ready to engage and in a timely manner
- Keep up to date with academic submissions and timelines
- Discuss your academic needs with your classroom teachers
- Walk in shared spaces and speak at a respectful volume while others are working and learning
- Conduct themselves with a sense of decorum
- When applicable, follow all guidelines outlined in the COVID-19 Handbook

Zero Tolerance Policies:
Willows Preparatory School has zero tolerance for alcohol, drugs, tobacco, weapons, age-inappropriate material, graffiti and repeated instances of bullying behavior. If any students are found in possession of or engaging in any related activities of the above, whether on campus and/or during school hours, appropriate referrals will be made, and consequences/outcomes will be documented in the student's file.

Consequences:
Any student misconduct will be documented and may result in the following:
- A referral to Head of School or Assistant Head of School
- Support services through Counselor referral
- Meeting with parent, teacher, and administration
- Probation from extracurricular activities or other privileges (i.e., sport, clubs, lunch outside)
- Restricted use of facilities

Misconduct issues of a more serious nature, such as those related to zero tolerance policies include:
- Suspension – You are expected to keep up with your schoolwork during this time, as no allowances will be made in this regard.
- Expulsion – You are permanently disenrolled from Willows Preparatory School

Technology:
Every student at WPS has their own Microsoft Surface. WPS's official Laptop/Technology Policy is found at the end of this document.

Teacher-Student E-mail Communication:
You have the opportunity to reach out to teachers and staff using email; however, when applicable, face-to-face communication is preferred. Student email addresses should only be used for communication about academic issues or to ask questions in a respectful and professional manner. Students are expected to check email daily. If a student receives an email or message from another student that is confusing or inappropriate, please notify a teacher or staff member immediately. Willows Preparatory School reserves the right to access all WPS student emails, reset all passwords, and if necessary, suspend all email activity.

Cell Phones and smart devices:
We understand that cell phones and other smart devices are an essential part of daily life. Smart watches while linked to cell phones are considered cell phones. Please make sure that the watches are on Do Not Disturb mode during the school day. Students are permitted to bring cell phones to school each day subject to the following conditions:
- Cell phones should remain OFF when students are present on the school campus. Cell phones must be stored in book bags during the 1st semester (or for however long COVID-19 Handbook guidelines are in place) or in student lockers.
- Students may use their cell phones to contact parents upon request. All authorized cell phone use must occur at the Front Desk in the main building and/or under the supervision of an administrator or teacher.

If a member of staff can see or hear a cell phone, the phone will be confiscated and turned over to the front desk. Confiscated phones will be returned at the end of that school day from the front desk after a parent is notified about the violation of this policy. All incidents are documented and recorded—repeat violations may result in additional consequences.

In case of a personal emergency on campus (illness, personal situation, etc.) the student's first line of contact is a staff member. In family emergency situations, parents should contact the front office if they need to reach a student.

Classroom Computer Use

Laptops will be used regularly in class for lessons, notes, and activities. Students should not be checking emails, grades, chatting via Teams, or any other activities on their computer unless the teacher has given them permission. If a student is found not using a computer appropriately, the computer will be taken away until the end of class and the following will take place:

- 1st Time: A warning from administration.
- 2nd Time: An email sent home to parents.
- 3rd Timer: Meet with administration and discuss possible repercussions.

WPS Students will no longer be allowed to use headphones for personal use in any place of the school building unless:

a) the headphones are being used for specific class content (i.e., sound editing a video for a project)

b) they are being used before or after school hours (8:30am-3:30pm)

Students should not have Spotify or any other streaming music program on their school computers.

Student Name (Print) _____

Student Signature _____ Date _____

Parent/Guardian Signature _____ Date _____

Please return by September 10, 2021