Marietta City Schools

2024–2025 District Unit Planner

Teacher(s)	**TOK PLC**	**Subject group and course**	**IB CORE THEORY OF KNOWLEDGE**		
Course part and topic	**UNIT 1: HUMAN AND NATURAL SCIENCES**	**SL or HL/Year 1 or 2**	**Year 2**	**Dates**	**August 3 Weeks**

Unit description and texts	**DP assessment(s) for unit**
This unit will explore two of the Areas of Knowledge in TOK by comparing their similarities and differences using the lenses of the Knowledge Framework. By using this approach, students will be able to see the ways in which the term "science" can be broadly interpreted, but also recognize the parameters for each discipline.	**Practice Essay that addresses a Knowledge Question relating to both AOKs.**

INQUIRY: establishing the purpose of the unit

Transfer goals *List here one to three big, overarching, long-term goals for this unit. Transfer goals are the major goals that ask students to "transfer" or apply their knowledge, skills, and concepts at the end of the unit under new/different circumstances, and on their own without scaffolding from the teacher.*
Students will be able to apply their knowledge to a written discussion of a knowledge question that mimics the style of the TOK Essay.

ACTION: teaching and learning through inquiry

Content/skills/concepts—essential understandings	**Learning process** *Highlight any pedagogical approaches used during the unit. Aim for a variety of approaches to help facilitate learning.*
<u>Students will know the following content:</u> The common understanding of what "science" is. The basic similarities and differences between natural and human sciences. How the ideas of precision, verification, and repetition are reflected in each type of science. The sources of bias in scientific endeavors. The ways in which ethics can be applied to scientific inquiry. **<u>Students will develop the following skills:</u>** Students will be able to compare and contrast human and natural sciences usings a Venn Diagram. Students will be able to communicate when one type of research might be considered more or less valuable. Students will be able to evaluate how culture can impact our choices. Students will be able to recognize the ethical boundaries that exist in research. **<u>Students will grasp the following concepts:</u>** The scientific method can be applied in different ways. The terminology we use influences what kind of knowledge we accept. Despite variation in its precision, verification, and ability to be replicated, research can still yield meaningful results. Even analytical scientists can be influenced by their culture.	**Learning experiences and strategies/planning for self-supporting learning:** Lecture Socratic seminar Small group/pair work PowerPoint lecture/notes Individual presentations Group presentations Student lecture/leading Interdisciplinary learning Details: ● Discussion of the nature of science + Venn Diagram activity ● Comparison of methods and tools + Research Review Activity ● Exploration of cultural influences + group evaluation of one of the six dimensions of culture. ● Review of ethical theories + paired evaluation of questionable research (short presentation) Other/s:

The idea of “science for science’s sake” might be harder to achieve than we think.	**Formative assessment:** Venn Diagram Research Review Activity Group Evaluation of Dimensions of Culture Paired Presentation--Evaluation of Questionable Research
	Summative assessment: **Practice Essay that addresses a Knowledge Question relating to both AOKs. (Criterion B)**
	Differentiation: Affirm identity—build self-esteem Value prior knowledge Scaffold learning Extend learning Details: Each aspect of the unit reflects a different part of the Knowledge Framework, which creates a predictable methodology for evaluating the topic based on previous experience in the course. Students are able to bring in their own experiences and past knowledge within each of these AOKs, apply that to their learning, and share it with their classmates.

Approaches to learning (ATL) *Highlight any explicit approaches to learning connections made during the unit. For more information on ATL, please see the guide.*
Thinking Social Communication Self-management Research Details: Students have multiple opportunities to communicate with both each other and the whole group in this unit. They are able to share ideas in small groups/pairs, and then also communicate that with the whole group. They also have opportunities to communicate through written assignments. Students have opportunities to conduct their own research and make their own choices about examples to use for evaluation.

Language and learning *Highlight any explicit language and learning connections made during the unit. For more information on the IB's approach to language and learning, please see the guide.*	**TOK connections** *Highlight any explicit TOK connections made during the unit.*	**CAS connections** *Highlight any explicit CAS connections. Provide a brief note in the "details" section explaining how students engaged in CAS for this unit, if applicable.*
Activating background knowledge Scaffolding for new learning Acquisition of new learning through practice Demonstrating proficiency Details:	Personal and shared knowledge Ways of knowing Areas of knowledge The knowledge framework Details:	Creativity Activity Service Details:

Students have an opportunity to utilize their learning to talk about their understanding and knowledge of human and natural sciences in a new context that ultimately will build an ability to complete their TOK Essay.	Students will explore the scope, methods and tools used in scientific knowledge production, perspective, and ethical considerations regarding the production, acquisition, and utilization of scientific knowledge.	N/A
Resources *List and link (if applicable) any resources used in this unit.*		
All resources for this unit are indicated on this detailed planning document: https://docs.google.com/document/d/1FifiuKZNUiw2zf9Vmz19NQKKokJoNyxF76uA7GWeRCY/edit?usp=sharing		

REFLECTION: considering the planning, process and impact of the inquiry

What worked well *List the portions of the unit (content, assessment, planning) that were successful*	**What didn't work well** *List the portions of the unit (content, assessment, planning) that were not as successful as hoped*	**Notes/changes/suggestions:** *List any notes, suggestions, or considerations for the future teaching of this unit*
In class discussions, group assignments, and the written unit assessment went well.	**N/A**	**Next year, we would like to structure and provide more guidelines for in class discussions using different learning protocols.**

Proposed Method of Resolution:	We will use more structured learning protocols for our classroom discussions.

Acknowledgement

Each member of the PLC must individually acknowledge that they have fulfilled the responsibilities of their role by completing the Curriculum Approval Statement Acknowledgement Form while signed in with their MCS Google Account. This includes having read, reviewed, listed all concerns, and approve of all contents included in the unit planner such as learning materials, resources, content, and assessments referenced. This acknowledgement must be completed by each member of the PLC for each Unit Planner.

All content and materials *not included* on the Unit Planner and Curriculum Approval Statement are the local school's responsibility (BOE IKB).

Curriculum Unit Approval Statement Acknowledgement Form- https://forms.gle/A8WYQ6Z64cidCiXj6