# Course Syllabus – Epistemic Curatorship: Knowledge Making in Museums

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**Instructor:** T.Y. Branch, contact@tybranch.com
**Teaching Assistant:** TBD
**Time and Location:** TBD
**Prerequisites:** N/A

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**Course Description:** This course examines museums as epistemic institutions that produce, validate, mediate, and contest scientific knowledge. It explores what counts as knowledge in museum contexts, how curatorial and communicative decisions justify or undermine claims, and who is recognized as a legitimate knower. Topics include epistemic differences between museums and interactive centres, translation and representation of research for publics, knowledge brokerage among scientists, communicators, and visitors, and contested issues such as artefact provenance and repatriation. Framed by the contemporary North American social contract for science, students will learn to critique exhibits and programs for epistemic virtues (transparency, evidential support, contextualization) and vices (oversimplification, exclusion), assess ownership and stewardship claims, and articulate normative positions on the responsibilities of science museums in shaping public understanding and civic decision-making.

### Learning Outcomes

By the end of this course, students will be able to:

- Define material culture and museology as concepts shaping what and who counts as knowledge.
- Explain how social contracts position institutions as epistemic brokers and gatekeepers.
- Analyze how exhibits and artifacts instantiate, justify, or obscure epistemic claims and values.
- Critique museums' epistemic authority and responsibilities within science–society relations.

### Required Texts and Materials

This course has no required textbook. Readings will be made available online.

### Course Policies

This course will use the standard online learning platform of the university for the purpose of announcements, accessing course materials, submitting assignments and discussion board posts. Instructors and the TA will only use official university email accounts to communicate with students. Group messages and announcements will be posted online as well as mentioned in class. It is the students' responsibility to ensure that the proper email notification system is set up to receive notifications. Students wishing to contact the instructors and the TA individually can do so via email at the addresses shown on the syllabus.

**Schedule**

Students are assigned a weekly reading for which they are expected to come to class prepared to discuss. These readings serve as the basis for the assignments and final paper.

| Week | Topic | Reading |
|---|---|---|
| 1 | **Introduction: What is Museology?** | Popadić, M. (2020). The Beginnings of Museology. *Muzeológia a kultúrne dedičstvo*, 8(2), 5-16. |
| 2 | **Science Museum and Science Centres** | Pedretti, E. (2002). T. Kuhn meets T. Rex: Critical conversations and new directions in science centres and science museums. *Studies in Science Education*, 37(1), 1–41. |
| 3 | **Sci-Communicators and Knowledge Brokers** | Pielke Jr, R. A. (2007). *The honest broker: making sense of science in policy and politics*. Cambridge University Press.<br>Ch.1 - Four idealized roles of science in policy and politics. |
| 4 | **Social Contracts for Science** | Branch, T.Y. and Heather Douglas (2023). Rethinking the Conceptual Space for Science in Society after the VFI *Philosophy of Science*, 1-10. |
| 5 | **Audience: The Public and Publics** | Dawson, E. (2014). "Not designed for us": How science museums and science centers socially exclude low-income, minority ethnic groups. *Science Education*, 98(6), 981-1008. |
| 6 | **Ethics in Museology** | Sola, T. (1997). Museums, museology and ethics. *Museum Ethics*, 168-75. |
| 7 | **Scientific Heritage** | Kirsch, S. (2011). Science, property, and kinship in repatriation debates. *Museum Anthropology*, 34(2), 91-96. |
| 8 | **Trust in Experts** | Altenmüller, M. S., Stark, J., Schlegl, S., Englhardt, K., Dengl, P., Henning, W., ...& Gollwitzer, M. (2024). Certainly uncertainty: Communicating uncertainty in science museums. *Zeitschrift für Psychologie*. 233(1), 6–16. |
| 9 | **Science Museums and Science Policy** | Bell, L. (2008). Engaging the public in technology policy: A new role for science museums. *Science Communication*, 29(3), 386-398. |
| 10 | **Controversy and Culture Wars** | Pedretti, E., Iannini, A. M. N., & Nazir, J. (2018). Exploring controversy in science museums: non-visitors and the body worlds exhibits. *Canadian Journal of Science, Mathematics and Technology Education*, 18, 98-113. |
| 11 | **The Future of Curation and Museology** | Chittenden, D. (2011). Commentary: Roles, opportunities, and challenges–science museums engaging the public in emerging science and technology. *Journal of Nanoparticle Research*, 13, 1549-1556. |
| 12 | **The Future of Museums and Technology** | Valeonti, F., Bikakis, A., Terras, M., Speed, C., Hudson-Smith, A., & Chalkias, K. (2021). Crypto collectibles, museum funding and OpenGLAM: challenges, opportunities and the potential of Non-Fungible Tokens (NFTs). *Applied Sciences*, 11(21), 9931. |

**Assessment:**

- *Quizzes.* There will be a total of 5 in-class quizzes randomly dispersed throughout the term. Quizzes will consist of a few short questions about the material covered in the lectures. Each quiz is worth 4% for 20% off the final grade. Missed quizzes cannot be excused without a valid excuse as outlined by university policy. For hints on how to read philosophy papers, see the 'How to Read Philosophy: A Guide' section below.[1]

- *1-Minute Paper.* Five times throughout the semester, students will be asked to post media content related to museology and curation (e.g. photo, gif, meme, TikTok video) to the online discussion board with a short explanation (140 characters) for how the post represents a philosophical theme (e.g. epistemic authority). Students are then expected to review the posts, and by the next class session, write a 1-minute reflection (no longer than 300 words) on how the posts relate to the course readings. Each commentary will be worth 2% for 10% of the final grade.

- *Midterm Exam.* The course midterm will be done in class (closed book) and will cover all material prior to that time. Worth 30% of final grade.

- *Final Exam.* The final exam will happen within the University's scheduled exam period and focus on the latter half of the course, though it will reference themes and readings from before the midterm. Students who preform better on the final exam compared to the midterm will have the final exam weighed 45% and the midterm is weighted 25% (instead of 30%). Otherwise the exam is 40% of the final grade.

[1] From Carolina Flores' quick guide.

**How to Read Philosophy: A Guide**

To develop effective reading habits for understanding philosophical articles, consider the following key elements. These steps should help to engage more deeply with philosophical texts, leading to a better understanding of complex ideas and enhancing the ability to recognize and form well-reasoned perspectives.

- **Argumentation:** Philosophy centers on formulating and evaluating arguments. Grasping those arguments clarifies competing viewpoints and enables authors to give well-reasoned support for (or objections to) a position.
- **Active reading:** Philosophy often requires multiple readings. Read the article once straight through to identify its main claims and overall structure. Mark passages confusing passages, and note first impressions of an argument's strengths or weaknesses for later inspection.
- **Close examination:** Reread slowly, underlining key concepts and annotating connections between premises and conclusions. Test comprehension by asking focused questions about terms and inferential steps. Pause regularly to paraphrase central points.

The aforementioned broad tips can be synthesized into the following steps:

1. *Identify the central issue:* State the precise question or problem the author is addressing in one clear sentence.
2. *Determine the thesis(es):* Extract the author's main conclusion(s), which are usually found in the introduction of the paper, and restate them succinctly.
3. *Analyze the arguments:* List the reasons given for each thesis and separate premises, supporting evidence, and explanatory claims.
4. *Define key terms:* Record technical vocabulary and the author's definitions, noting any terms that have specialized or ambiguous senses.
5. *Consider objections:* Note relevant counterarguments the author raises (or omits) and summarize the author's replies.
6. *Reconstruct formally:* Set out each argument as a thesis with its affiliated (numbered) premises to reveal the logical structure.
7. *Evaluate:* Judge soundness and validity: check whether the premises are true or plausible, whether they adequately support the conclusion, and identify any hidden assumptions.