**EMBEDDED LITERACIES**

**TECHNOLOGY LITERACY**

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|  **Technology Literacy** |
| **Goal** | **Expected Learning Outcomes** |
| **Goal 1: Successful students develop a critical appreciation of the relations between technologies and their contexts (social, cultural, and historical), and of the range of effects and consequences (legal, ethical, political) produced or enabled by particular technologies.** | **Successful students are able to …****1.1** Critically describe the relationships between technology and society in historical and cultural contexts. |
| **1.2** Recognize how technologies emerge and change. |
| **1.3** Evaluate the social and ethical implications of technology. |
| *If Bookends ELOS do not include technology facility, then include* |  |
| **Goal 2: Successful students develop a working familiarity with specific forms of technology, and of their practical possibilities and limitations, in relation to particular disciplinary or interdisciplinary projects; OR****Demonstrate competency in the use of technology in relation to particular course objectives or disciplinary content.** | **2.1** Match technology tools to the problem; given a particular task or problem students understand the range of technology tools that could be used to address that problem. |
| **2.2** Appreciate the fundamentals of the technology tools relevant to a problem or discipline. (exhibit competency) |
| **2.3** Apply the results or output of the technology to communicate a conclusion of a task or problem (integrating technology output) |
| **2.4** Engage in preliminary consideration of both the possibilities and constraints of technology within a particular disciplinary context (reflecting on implications) |

**DATA ANALYSIS**

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|  **Data Analysis Literacy** |
| **Goal** | **Expected Learning Outcomes** |
| **Successful students will meet the goals for *either* a Quantitative Data Analysis (A) or Qualitative Data Analysis (B) course.****Quantitative Data Analysis (A) Goal: Successful students develop skills in****drawing conclusions and critically evaluating results based on data.** | **Successful students are able to …****1.1A** explain basic concepts of statistics and probability. |
| **1.2A** apply methods needed to analyze and critically evaluate statistical arguments. |
| **1.3A** recognize the importance of statistical ideas. |
| **1.4A** evaluate the social and ethical implications of data collection and analysis, especially in relation to human subjects. |
| **Qualitative Data Analysis (B) Goal:** **Successful students develop skills in** **drawing conclusions and critically evaluating results based on data.** | **1.1B** explain the utility of different approaches to qualitative data analysis. |
| **1.2B** apply key methods and tools in qualitative data analysis. |
| **1.3B** interpret the results of qualitative data analysis to answer research question(s). |
| **1.4B** evaluate the social and ethical implications of data collection and analysis, especially in relation to human subjects. |

Carver, R., Everson, M., Gabrosek, J., Horton, N., Lock, R., Mocko, M., Rossman, A., Roswell, G. H., Velleman, P., Witmer, J., & Wood, B. (2016). *Guidelines for Assessment and Instruction in Statistics Education (GAISE) College Report 2016*. Retrieved from [<https://commons.erau.edu/publication/1083>]

*National Numeracy Network*. [<http://www.nnn-us.org/>]

*Quantitative Inquiry, Reasoning, and Knowledge (QuIRK) Initiative.* Carleton College. [<https://apps.carleton.edu/quirk/>]

**ADVANCED WRITING**

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| **Advanced Writing Literacy** |
| **Goals** | **Expected Learning Outcomes** |
| **Goal 1: Successful students develop advanced skills in inquiry, composing, and communicating for a specific purpose, genre, audience, and context.**  | **Successful students are able to …****1.1** Investigate and use relevant conventions to advance their objectives with specific genres, audiences and contexts. |
| **1.2** Evaluate and use credible and relevant sources of information to express ideas and make arguments.  |
| **Goal 2: Successful students apply knowledge of writing and research to specific contexts.** | **2.1** Reflect on how they adapt rhetorical and research strategies they have learned to new contexts. |
| **2.2** Present their research and writing in ways that demonstrate its importance. |
| **2.3** Evaluate social and ethical implications of writing and information literacy practices. |

Beaufort, A. 2007. *College writing and beyond: A new framework for university writing instruction*. Utah State University Press. [<https://muse.jhu.edu/book/9241>]

Yancey, K., L. Robertson, & K. Taczak. 2014. *Writing across contexts: Transfer, composition, and sites of writing.* Utah State University Press. [<https://muse.jhu.edu/book/30930>]

Nowacek, R. 2011. *Agents of integration: Understanding transfer as a rhetorical act.* Southern Illinois University Press. [<https://muse.jhu.edu/book/38832>]

**Not for review: The Embedded Literacies Committee wants to use the goals and elos to create rubrics for assessing syllabi as well as for assessment. Below is an example of the tech group’s approval form.**

**Syllabus Approval**

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| **Embedded Technology** | **Substantial** | **Sustained** | **Minimal** | **Score** |
| 1.1 Relationships: Understanding and thinking critically about technology in historical, cultural, and social context.  | Students extensively discuss and evaluate technologies in a variety of historical, cultural, and social contexts | Students discuss and evaluate technologies in multiple historical, cultural, and social contexts  | Students discuss and evaluate at least one technology in a historical, cultural, and social context |  |
| 1.2 Innovation, development, and use: Students will appreciate how technologies emerge and change. | Students extensively discuss and evaluate innovation, development, and use of a variety of technologies | Students discuss and evaluate innovation, development, and use of multiple technologies | Students discuss and evaluate innovation, development, and use of at least one technology |  |
| 1.3 Impact: Students will recognize the potential ethical, legal, and social impacts of technology. | Students extensively discuss and evaluate the ethical, legal, and social impacts of a variety of technologies | Students discuss and evaluate the ethical, legal, and social impacts of multiple technologies | Students discuss and evaluate the ethical, legal, and social impacts of at least one technology |  |
| Total |  |