Characteristics of Technology Courses Subject to Approval for Areas B or D Guidelines developed by the Council on General Education

Recall that all courses in Areas A–E must be taught at the collegiate level, be broadly focused, and clearly address the general education learning outcomes of the institution requesting course approval. Such courses cannot be skills-based or place primary emphasis on studio, performance, field study, or internship.

Additionally, courses under consideration for Area B must include analytical, historical, critical and/or appreciative material, while courses under consideration for Area D must be analytic in nature and have a problem-solving component.

Technology courses that adhere to the core principles summarized above should focus on broad appreciative, historical, critical, analytical or problem-solving content rather than the skill in using particular software packages. While software packages may be incorporated into a course to demonstrate, apply or analyze the more broadly focused content, learning the software package should not be the primary emphasis of the course.

Examples of acceptable courses for Areas B or D:

Courses in Programming: Should involve a focus on developing algorithmic thinking, logic/decision structures and information storage structures.

Courses in Data Science: Should involve a focus on data analysis and relationship identification. Tools of statistical analysis are introduced and used as appropriate.

Courses in Modeling and Simulation: Should involve a focus on developing models and/or simulations of systems based on data.

Survey Courses: Should involve an understanding of the development and place of computation, incorporating sections on history of computation, mathematics of computation, technology ethics, etc. Such courses should include learning outcomes focused on introduction to algorithm development and the mathematical foundations of computing such as base conversions and Boolean logic.

Example of courses not acceptable in any area of the core:

Courses that focus on developing software package use skills (such as word processing, presentation or spreadsheet software) or using technology to perform basic life functions (email, etc.).

Examples of courses that may not be acceptable in Area D, but may be acceptable in other core areas:

Courses that emphasize design without concurrent algorithmic coding emphases. Such courses may be acceptable in Area B or Area C.

Courses that focus exclusively on the historical or social aspects of technology. Such courses may be acceptable in Area B or Area E.

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