**LOGIC**

**Overview and Contact Information**

“How critical is logic? I will tell you: in every corner of the known universe, you will find either the presence of logical arguments or, more significantly, the absence.” —V. K. Samadar

Logic is a part of every discipline. There is reasoning in every field of inquiry. There are rules behind every work of art, behind every natural language. There is inference in every intelligence, human and inhuman. Every issue of law and public policy bends to the power of logic.

The study of logic itself is thus of the greatest importance. The Logic Certificate Program brings together aspects of logic from different regions of the curriculum: philosophy, mathematics, computer science, and linguistics. The program is designed to acquaint students with the uses of logic and initiate them in the profound mysteries and discoveries of modern logic.

**See Also**

- Philosophy (http://catalog.mtholyoke.edu/areas-study/philosophy/)
- Mathematics (http://catalog.mtholyoke.edu/areas-study/mathematics/)

**Contact Information**

Samuel Mitchell, Professor of Philosophy

https://www.fivecolleges.edu/logic (https://www.fivecolleges.edu/logic/)

**Requirements for the Certificate**

A minimum of six courses:

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No more than four courses can be counted toward the certificate from any single discipline (philosophy, linguistics, mathematics, computer science).

At least two courses must be taken at an advanced level.

At least one course should expose students to the basic metatheory of first order logic, including incompleteness. Courses satisfying this requirement include PHIL-327 at Mount Holyoke, Philosophy 220 at Smith, Math-385 at Amherst, and Philosophy 513 or 514 at the University of Massachusetts.

**Total Courses** 6

1. Regularly offered Logic courses at the Five Colleges (https://www.fivecolleges.edu/academics/logic-program/#courses)
2. 500 or above at University of Massachusetts; 300 or above at Amherst, Hampshire, Mount Holyoke or Smith.

**Additional Specifications**

- Students must receive a grade of B or better in each course counting toward the certificate.