

Certificate in Biomedical Research

The Certificate in Biomedical Research will recognize the development of significant research skills by undergraduate students in the disciplines of biochemistry, cell biology, pharmacology and physiology, or other life and sciences programs. Students will engage in world-class biomedical research programs and will acquire a broad range of technical skills through substantive laboratory courses and independent research project experiences, as well as general research skills through courses which explore the current biomedical research literature.

Students interested in pursuing the Certificate in Biomedical Research must discuss their program of study with either the Undergraduate Coordinator or the Student Advisor. Completion of the certificate must be recorded with the Biomedical Sciences Undergraduate Education Committee at least one week prior to the application deadline for convocation. Students wishing to receive the Certificate in Biomedical Research must also apply through the Undergraduate Student Services in the Faculty of Science by the application deadline for convocation.

Students may pursue the Certificate in Biomedical Research by fulfilling the existing requirements for their program and by completing at least *18 in courses as follows:

- a. A minimum of *3 in senior laboratory skills courses selected from:
 - BIOCH 398 (*3); BIOCH 401 (*6); CELL 398 (*3); PMCOL 301 (*3); PMCOL 302 (*3); PMCOL 337 (*3); PHYSL 310 (*3)

- b. *3 - *6 in courses which explore current biomedical research literature selected from:
 - BIOCH 425 (*3); BIOCH 481 (*3); BIOCH 465 (*3); BIOCH 495 (*3); CELL 405 (*3); CELL 425 (*3); CELL 445 (*3); PMCOL 401 (*3); PMCOL 402 (*3); PMCOL 415 (*3); PMCOL 416 (*3); PHYSL 466 (*3); PHYSL 444 (*3); ONCOL 425 (*3 or *6)

- c. A minimum of *9 in directed research project(s) selected from:
 - BIOCH 482 (*3); BIOCH 497 (*6); BIOCH 498 (*3); BIOCH 499 (*6); CELL 498 (*3); CELL 499 (*6); PMCOL 498 (*6); PHYSL 465 (*3); PHYSL 467 (*6); PHYSL 468 (*6); PHYSL 469 (*6)

- d. Presentation at a research day or conference either on or off campus.