

# Biomedical Science Courses (BMED)

This is a list of all biomedical science courses. For more information, see Biomedical Science.

**BMED:5205 Practical Bioinformatics 1 s.h.**  
 Formal instruction on the use and application of bioinformatics for bench scientists; bioinformatics, resources, genome annotations, sequence analysis, comparative genomics, expression analysis, and systems biology. Requirements: biostatistics.

**BMED:5207 Principles of Molecular and Cellular Biology 3 s.h.**  
 Structure of DNA, RNA, and Protein; DNA replication, genetic and epigenetic regulation; RNA production and processing; protein production and post-translation modification; cellular membranes and trafficking; cytoskeleton and regulation of cell junctions and migration; signal transduction and regulation of cell cycle and apoptosis; didactic lectures and group discussion of primary research publications.

**BMED:7270 Scholarly Integrity/Responsible Conduct of Research I 0 s.h.**  
 Training in principles of scholarly integrity and the responsible conduct of research; facilitated discussions of case studies; student/mentor responsibilities in pursuit of scholarly work (ownership, authorship, plagiarism/falsification/fabrication of data); student/mentor relationships and intellectual dialogues (communication, collaboration, grievance management); student responsibilities to institution/scholarly community/society (intellectual property, conflict of interest, fiscal responsibilities, protection of human/animal subjects). Requirements: successful completion of CITI online training (greater than 80 percent score for each module) and enrollment in Graduate College degree-seeking program. Recommendations: minimum first-year graduate standing (Ph.D., M.S./M.A.), and involvement in mentored research activities (extramurally or intramurally funded).

**BMED:7271 Scholarly Integrity/Responsible Conduct of Research II 0 s.h.**  
 Training in principles of scholarly integrity and the responsible conduct of research; facilitated discussions of case studies; student/mentor responsibilities in pursuit of scholarly work (ownership, authorship, plagiarism/falsification/fabrication of data); student/mentor relationships and intellectual dialogues (communication, collaboration, grievance management); student responsibilities to institution/scholarly community/society (intellectual property, conflict of interest, fiscal responsibilities, protection of human/animal subjects). Requirements: successful completion of CITI online training (greater than 80 percent score for each module) and enrollment in Graduate College degree-seeking program. Recommendations: minimum of first-year graduate standing (Ph.D., M.S./M.A.) and involvement in mentored research activities (extramurally or intramurally funded).

**BMED:7604 Scholarly Integrity/Responsible Conduct of Research I 0 s.h.**  
 Training in principles of scholarly integrity and the responsible conduct of research; facilitated discussions of case studies; student/mentor responsibilities in pursuit of scholarly work (ownership, authorship, plagiarism/falsification/fabrication of data); student/mentor relationships and intellectual dialogues (communication, collaboration, grievance management); student responsibilities to institution/scholarly community/society (intellectual property, conflict of interest, fiscal responsibilities, protection of human/animal subjects); meets responsible conduct of research training obligation for postdocs and faculty holding an NIH K award. Requirements: successful completion of CITI online training (greater than 80 percent score for each module).

**BMED:7605 Scholarly Integrity/Responsible Conduct of Research II 0 s.h.**  
 Training in principles of scholarly integrity and the responsible conduct of research; facilitated discussions of case studies; student/mentor responsibilities in pursuit of scholarly work (ownership, authorship, plagiarism/falsification/fabrication of data); student/mentor relationships and intellectual dialogues (communication, collaboration, grievance management); student responsibilities to institution/scholarly community/society (intellectual property, conflict of interest, fiscal responsibilities, protection of human/animal subjects); meets responsible conduct of research training obligation for postdocs and faculty holding an NIH K award. Requirements: successful completion of CITI online training (greater than 80 percent score for each module).