

First and Second Year Coursework for incoming fall-term PhD students,
2018-2019 academic year, Health and Clinical Informatics Program

Year 1 (in order to take the comprehensive exam the following August or September)

FALL 18	WINTER 19	SPRING 19	SUMMER 19
BMI 610 Intro to Biomedical Informatics (3)	BMI 618 Project Management (3)	BMI 617 Organizational Behavior (3)	Cognate Course (3)
BMI 640 Computer Science and Programming for Clinical Informatics (3)	BMI 644 Databases (3)	Computer Science Individual Competency (3)*	Individual Competency (as needed)
HIP 511 Clinical Research Design I (2)	HIP 512 Clinical Research Design II (2)	HIP 513 Clinical Research Design III (2)	
BMI 630 Practice of Healthcare (3)	BMI 660 Design and Evaluation (3) Online	BMI 676 Ethics (3)	August/September: Comprehensive exam
BMI 605F PhD/Fellows Meeting (1)	BMI 605F PhD/Fellows Meeting (1)	BMI 605F PhD/Fellows Meeting (1)	
BMI 601 Research Rotation (varies)	BMI 601 Research Rotation (varies)		
HIP 516 Protection of Human Subjects			
TOTAL: 13+ credits	TOTAL: 12+ credits	TOTAL: 9 credits	TOTAL: 5 credits minimum

Students must get a B or higher in all required courses.

Year 2 (in order to take the qualifying exam the following September)

FALL 19	WINTER 20	SPRING 20	SUMMER 20
Individual Competency (3)	HIP 528 (3), Prereq: HIP 512A** (1) OR other Individual Competency	HIP 529 (3), Prereq: HIP 512A** (1) OR other Individual Competency	BMI 661 – Qualitative Research Methods (3) Summer Hybrid (even years only)
BMI 670 – Scientific Writing (3) Online	Individual Competency (as needed)	BMI 662 Quantitative Research Methods (3), OR BMI 624 Analytics for Healthcare (3)	
	BMI 652A – Research in Bioinformatics (2)	BMI 652B – Research in Bioinformatics (2)	September: Qualifying Exam
Cognate Course (3)	Cognate Course (3)	Cognate Course (3)	
BMI 605F PhD/Fellows Meeting (1)	BMI 605F PhD/Fellows Meeting (1)	BMI 605F PhD/Fellows Meeting (1)	
TOTAL: Variable credits	TOTAL: Variable credits	TOTAL: Variable credits	TOTAL: 5 credits minimum

Biomedical Informatics – Individual Competency – need 1

BMI 612 – Clinical Information Systems (3)

BMI 513 – Electronic Health Record Lab (3)

BMI 614 – Information Retrieval (3) – Odd springs only
BMI 616 – Standards for Interoperability (3). Winter term online
BMI 620 – Consumer Health Informatics (3)
BMI 621 – Public Health Informatics (3) – Even summers only

Healthcare – Individual Competency – need 1

BMI 636 – Evidence-based Medicine (3). Summer hybrid odd years only.
BMI 637 – Health Care Quality (3)
BMI 638 – Medical Decision Making (3)

*Computer Science – Individual Competency – need 1

BMI 646 – Software Engineering (3).
BMI 648 – Human Computer Interaction (3). Annual summer hybrid.

Advanced Research Methods – Individual Competency – need 6 credits from the list below.

HIP 528 Applied Biostatistics I (3) Graded. Take during Year 2. Prereq HIP 512A*
HIP 529 Applied Biostatistics II (3) Graded. Take during Year 2. Prereq HIP 512A*
Various – PSU Methods course (3-4). Check with advisor.
Various – PSU Methods course (3-4). Check with advisor.

**Prereq HIP 512A is offered each term as a directed independent study.

Note: All class scheduling is subject to change.