

Curriculum for Combined Residency Program

Comparative Medicine: **Required**

MIP 792 A	Graduate Seminar	1	Path 103, Tues at noon – every semester
MIP 792 C	Microscopy Seminar	1	DMC 101, Wed at 8am–4 semesters through residency
MIP 796-005	Comparative Medicine Seminar	1	4-6 semesters
MIP 778	Pathology of Laboratory Animals	3	Fall of odd years
MIP 779	Laboratory Animal Pathology Rotation	1	Spring of even years
MIP 666	Writing Scientific Manuscripts	3	Fall
MIP 540	Lab Biosafety	2	Spring
CM 666	Science and Ethics	1	Spring
ERHS/STAT544	Biostatistics	3	
CSU Supervisor Development Program			Obtain certification during residency.

Comparative Medicine: **Highly Recommended (Based on areas of study)**

BC 463	Molecular Genetics	3	Fall
CM 501	Advanced Cell Biology	4	Fall
MIP 651	Immunobiology	3	Fall

Anatomic and Clinical Pathology Residents: **Required**

MIP 792 A	Graduate Seminar	1	Path 103, Wed at 9am – every semester
MIP 792 C	Microscopy Seminar	1	DMC 101, Wed at 8am – 6 semesters through residency
MIP 796-010 (AP)	Group Study – Gross Pathology	1	Fall; Wed 5pm, all first years, Clinical Path 2 years
Rounds	Anatomic or Clinical Path		Every semester through residency

Anatomic and Clinical Pathology Residents: **Highly Recommended**

MIP651	Immunobiology	3	Fall
MIP767	Advanced General Pathology	1	Fall
MIP766 (AP)	Cytopathology	1	Spring
MIP768 (CP)	Advanced Clinical Path	1	Spring
VS 562	Applied Data Analysis	3	
or			
STAR 511/512	Design and Data Analysis for Researchers I and II	4	Fall/Spring

Anatomic and Clinical Pathology Residents: **Recommended**

CM 501 (AP/CP)	Advanced Cell Biology	4	Fall
or			
BC 565	Molecular Regulation of Cell Function	3 or 4	Spring
MIP 675	Advanced Bioanalytical Pathology	3	Spring of odd years
MIP 765 (AP)	Comparative Neuropathology	2	Spring of even years
MIP 778 (AP)	Pathobiology of Laboratory Animals	3	Fall of odd years
MIP 779 (AP)	Laboratory Animal Pathology Rotation	1	Spring of even years
MIP643 (AP/CP)	Grant writing	1	Spring.

Anatomic and Clinical Pathology Residents: Other possibilities

VS 628	Physiology and Pathophysiology	3	
ERHS 510	Cancer Biology	3	Spring
MIP 666	Writing Scientific Manuscripts	3	Fall
ERHS 542/544	Biostatistical Methods for Qualitative Data	3	Fall
BC 563	Molecular Genetics	4	Fall
MIP 654	Research policies and regulation	1	Fall
MIP 680A5, MIP 680A6, MIP 680A7	Immunity to Infection modules	3	Spring of odd years.
ERHS 603	ToxPath	3	Fall
ERHS 602	Toxicological Mechanisms	3	Spring
ERHS 568	Pharmaceutical and Regulatory Toxicology	3	Spring

Microbiology Residents: **Required**

MIP 792 A	Research Seminar	1	Path 103, Tues at noon – every semester
MIP 700	Topics in Microbiology	1	Once per year, minimum 4 semesters
MIP 654	Research Policies and Regulations	1	Fall

Microbiology Residents: **Highly Recommended**

MIP 540	Biosafety in Research Labs	2	Spring
MIP 581A5, MIP 581A6, MIP 581A7	Advanced Virology modules	3 total	Spring even years
MIP 651	Immunobiology	3	Fall
MIP 580B1, MIP 580B2, MIP 580B3	Bacterial Pathogenesis modules	3 total	Fall
Statistics	Course determined by graduate committee	3-4	

MIP Graduate Degree Credit Requirements

Additional specific [coursework](#) providing instruction in a discipline related to the MS or PhD degree may be required as recommended by the student's graduate committee.

MS	PhD
30 credits total	72 credits total
24 credits at CSU	30 credits can be transferred from MS or DVM degree
16 credits must be 500+	21 credits must be 500+ (beyond MS)
12 credits must be regular courses	16 credits must be regular courses
9 credits must be regular w/ MIP prefix	13 credits must be regular w/ MIP prefix