

BISC MAJOR REQUIREMENTS 2018-19

Three BISC Required Courses for 11-12 credits (all courses in major must be completed with grade of C or better)					
1. Human Clinical Anatomy	BISC 2135	Clinical Human Anatomy	4 cr.	Fall	BIOL 1001
2. One BIOCHEMISTRY course	BISC 2070	Biochemistry for Health Prof.	3 cr.	Spring	BISC 2050 or CHEM 2111
	BISC 3213	Biochemistry	4 cr.	F/Spr/Sum	CHEM 2112 (can be concurrent). Strongly recommended for pre-med/dent; required for MU PA
3. Human Physiology	BISC 4145	Human Physiology	4 cr.	F/Spr/Sum	BISC 2135 and biochemistry course

BISC Major content areas and electives to achieve 33 credits in the major with all courses completed with a C or better.						Content Areas			NRSC minor 18 cr.*
						Anat/Syst BISC 9391 3 cr.	Cell/Mol BISC 9392 6 cr.	Dis/Path BISC 9393 6 cr.	
BISC 9290 = Non-major elective		BISC 9291 = BISC H&S Cognate		BISC 9390 = BISC Major Elective					
BISC 1001	Contemporary Issues in Biomedical Sciences	1	Fall	Mandatory for all new freshman in BISC major					
BISC 1030	Introduction to Dentistry	1	Spring	Pre-dental Scholars; Consent required					
BISC 3110	Nutritional Aspects of Health	3	Inactive						
BISC 3112	Head and Neck Anatomy	3	Fall	BISC 2135 and BISC major or consent of instructor		x			
BISC 3115	Human Microbiology (or BISC 7410 for PA)	3	Fall	BIOL 1002 and Biochemistry (can be concurrent)			x		
BISC 3136	Gross Anatomy for the Biomedical Sciences	2	Spring	BISC 2135 and consent of instructor					
BISC 3150	General Pathology	3	Spring	BISC 2135 and BISC 4145; or BISC 1015 or 2015/2016				x	
BISC 3850	Systems Neuroscience	3	Fall	BIOL 1001		x			2 of 3*
BISC 3859	Evolution	3	Spring	BIOL 1001/1002, biochemistry, and instructor consent					
BISC 4120	Pharmacology (or BISC 7120 for PA)	3	Spring	Biochemistry & BISC 4145 (or BISC 1015 or 2015/2016)				x	
BISC 4140	Functional Neuroanatomy	3	Spring	BISC 2135 or BISC 7130		x			2 of 3*
BISC 4146	Physiology In Depth: Contemporary Issues (or BISC 4146H)	1	Fall	BISC 4145					
BISC 4147	Human Physiology Lab	1	Spring	BISC 4145 (can be concurrent) or BIOL 3801 w/consent					
BISC 4151	Advanced Pathology (or BISC 4161H)	1	Spring	BISC 3150 (can be concurrent)					
BISC 4155	Diseases of the Brain	3	Fall	BISC 2135				x	x
BISC 4160	Molecular Pathology	3	Fall	Biochemistry (can be concurrent)			x	x	
BISC 4165	Microbiology Lab	1	Spring	BISC 3115 and consent of instructor					
BISC 4170	Biology, Moral Behavior and Policy	3	Spring	BISC 2135					x
BISC 4173	Principles of Human Embryology	3	Spring	BIOL 1002 and BISC 2135		x			
BISC 4214	Advanced Biochemistry (or BISC 4214H)	1	Fall	BISC 3213 (can be concurrent)					
BISC 4275	Modern Plagues: Addiction, Obesity and Stress	3	Inactive	BISC 4145 and instructor consent				x	x
BISC 4325	Endocrinology	3	Spring	BIOL 1002; and BISC 4145 or BIOL 3701		x			x
BISC 4340	Medical Genetics	3	Fa/Spr	BISC 3213 or BIOL 4101 (can be concurrent)			x		
BISC 4341	Advanced Cellular Genetics and Cancer (or BISC 4341H)	1	Spring	BISC 4340 (can be concurrent)					
BISC 4514	Human Microanatomy (w/lab)	4	Fall	BISC 1001 and BISC 2135		x			
BISC 4851	Advanced Systems Neuroscience (or BISC 4851H)	1	Spring	BISC 3850 (can be concurrent)					
BISC 4931	Topics in Biomedical Sciences	var.	Every Term	Varies by Topic					
BISC 4986	Internship in Biomedical Sciences	1-3	Every Term	Max. 6 cr. total, 3 cr. towards BISC major					
BISC 4991H	Honors Community Engagement in Biomedical Science	1-3	Every Term	Limited to Students in the Honors Program					
BISC 4995	Independent Study (or BISC 4995H)	1-3	Every Term	Maximum 3 credits towards BISC major					w/approval
BIOL 2201	Genetics	3	Spring	BIOL 1001/1002			x		
BIOL 2301	Cell Biology	3	Fall	BIOL 1001/1002			x		
BIOL 3202	Experimental Genetics	3	Spring	BIOL 2201 (can be concurrent) and consent					
BIOL 3302	Experimental Cell Biology	3	Fall	BIOL 2301 (can be concurrent)					
BIOL 3501	Neurobiology	3	Spring	BIOL 1002			x		2 of 3*
BIOL 3502	Experimental Neurobiology	3	Spring	BIOL 3501 (can be concurrent) and consent					
BIOL 3702	Experimental Physiology	3	Fall	BIOL 3701 (can be concurrent) and consent					
BIOL 4102	Experimental Molecular Biology	3	occas.	BIOL 1001					
BIOL 4806	Immunobiology	3	Spring	BIOL 1001/1002			x		
CLLS 2050	Forensic Science	3	Spring	None					
CLLS 2060	Public Health	3	Spring	None					
CLLS 3160	Molecular Diagnostics	3	Fall	Biochemistry (can be concurrent)					
BISC/PRDS students	BISC 7515 counts towards Anat/systems content; BISC 7514/7516 count towards BISC electives					x			
BISC/DPT students	BISC 7130 counts towards Anat/Systems content; PHTH 7515 Pathology/Pathophysiology counts towards BISC electives (4 cr.);					x			
BISC/PA students	BISC 7130 counts towards Anat/Systems content; PHTH 7558 Neuroanatomy counts towards BISC electives					x			

BISC Laboratory Requirement:			
BIOL 2001	Principles of Biological Investigation (required for professional programs that need 8 cr. of BIO with lab)	Fall/Spring	BIOL 1001 and BIOL 1002 (can be concurrent)
CLLS 2200	Concepts in Clinical Laboratory Medicine	Fall	
CLLS 3160	Molecular Diagnostics: Laboratory Techniques	Fall	CLLS or BISC major and Biochemistry (can be concurrent)
PHAS 7270	Diagnostics Technology	Spring PA1	admission to the PA program

BISC Health and Society Cognate (H&S) - one course:			Prerequisites
BISC 4170	Biology, Moral Behavior and Policy (applies as BISC elective or H&S cognate, but NOT both)	Spring	BISC 2135
BISC 4275	Modern Plagues: Addiction, Obesity and Stress (applies as BISC elective or H&S cognate, but NOT both)	Inactive	BISC 4145 and instructor consent
BISC 4381	Politics of U.S. Health Care	Fall	Jr. Standing
BISC 4461	Comparative Health Politics and Policy	Spring	Jr. Standing
CLLS 2060	Public Health (applies as BISC elective or H&S cognate, but NOT both)	Spring	None
CMST 4500	Health Communication	Spring	CMST 2100 or instructor consent
COMM 4330	Health, Science and Environmental Communication	Spring	None
HEAL 1025	Culture and Health (can be H&S or UCCS DC, but NOT both)	every term	None
HEAL 1200	Women's Health	Fall/Spring	None
HEAL 1400	Veteran Health and Culture	every term	None
HEAL 2100	Primary Health Care Concepts	Fall/Spring	Sophomore standing
PSYC 3420	Health Psychology	Spring	PSYC 2050 or PSYC 3601
SOCI 3300	Sociology of the Life Course	Fall	SOCI 1001 recommended
SOCI 3500	Culture, Health and Illness	Spring	SOCI 1001, ANTH 1001 or ANTH 2101 recommended
SOCI 3520	Health Care Systems	Inactive	SOCI 1001 recommended
SOCI 3550	Race, Gender and Medicine	Fall	SOCI 1001, ANTH 1001 or ANTH 2101 recommended
SOCI 3570	Men, Masculinities and Health	Fall	SOCI 1001 recommended
SOCI 4300	Sociology of Aging	Spring	SOCI 1001 recommended
SOWJ 1001	Introduction to Social Welfare and Justice	every term	None
SOWJ 2200	Human Behavior in the Social Environment	Fall/Spring	None
SOWJ 4700	Global Aid and Humanitarianism	Spring	None
SPAN 4715	Advanced Spanish for the Health Professions	every term	SPAN 3710 or SPAN 3005
BISC 4930	Special Topics (approved based on topic)	variable	BISC dept. approval based on topic
BISC 4931	Topics (approved based on topic)	variable	BISC dept. approval based on topic
PHAS 7118	Clinical Decision-Making 3	Spring PA2	admission to the PA program

Other BISC cognates:

- BIOL 1001/1002
- CHEM 1001/1002
- organic chemistry (BISC 2050 - 1 cr. or CHEM 2111 - 4 cr.)

BISC UCCS requirements

- UCCS ISB PSYC 1001
- UCCS MR statistics class (MATH 1700, PSYC 2001 or SOCI 2060)
- UCCS LPA must be a literature course

Other Neuroscience Minor Courses:

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| SPPA 4310 | Introduction to Neurological Disorders | PSYC 4330 | Human Factors Engineering |
| BIOL 4956 | Lab Research Project (with approval) | PSYC 4960 | Advanced Undergraduate Seminar |
| PSYC 3320 | Cognition | PSYC 4995 | Independent Study (with approval) |
| PSYC 3601 | Biopsychology | BIEN 4500, 4510, 4600, 4620, 4995 | |
| PSYC 3650 | Affective Neuroscience | | |