



## 2023-2024 Summary of Course Prerequisites

The 2023-2024 AACCP Course Prerequisite Summary is intended to help applicants more easily determine how the course prerequisites for Doctor of Pharmacy (Pharm.D.) degree programs overlap across colleges and schools of pharmacy in the United States. The Summary reflects the total number of semester hours pharmacy applicants must complete per subject area, as captured in the [PharmCAS School Directory](#). Some colleges and schools of pharmacy offer more than one program, pathway, or campus for Pharm.D. degree students and are represented in the Summary more than once. The Summary generally reflects the minimum number of course prerequisites per program. Pharmacy schools may have additional requirements, recommended courses, preferences, or policies that are not reflected in the Summary. Schools may also allow applicants to substitute courses or choose different prerequisite tracks. Applicants should not rely solely on this Summary to determine the course prerequisites for a particular pharmacy school. Visit the [PharmCAS School Directory](#) for program-specific details and contact schools directly to determine whether a particular college course will fulfill a prerequisite.

### Course Subject Descriptors:

The following descriptors are only intended to provide general guidance. Not all course subjects are described, and no school requires prerequisite courses in every subject. Schools may require specific or advanced courses in a particular subject area. Visit the [PharmCAS School Directory](#) for program-specific details.

- **Anatomy, Physiology, and Anatomy & Physiology:** Schools often accept separate anatomy and physiology courses OR combined anatomy & physiology (A&P) I and II courses. Lab requirements vary.
- **Biochemistry:** Lab requirements vary.
- **Biology/Biological Science:** General biology I & II are commonly required. Genetics or cell biology may also be required. Lab requirements vary.
- **Chemistry:** General chemistry I & II and organic chemistry I & II are commonly required. Lab requirements vary.
- **Communication/Speech (Verbal):** Public speaking or speech may be preferred or required.
- **Humanities:** General or specific courses in history, languages, literature, philosophy, the arts, or religion may be required.
- **Microbiology:** Lab requirements vary.
- **Physics:** Lab requirements vary.
- **Psychology:** General psychology is most commonly required. See also social/behavioral science.
- **Math:** Calculus (non-business) is most commonly required.
- **Social/Behavioral Science:** Psychology and/or sociology may be preferred or required.
- **Statistics:** Biostatistics may be preferred or required.

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy*	Physiology*	Anatomy & Physiology*	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Albany CPHS					11	16	3						9	3	3	3			3	3	9		63
American U Hlth Sci	3	3			8	16	3		3	3				3	3		3			3		6	57
Appalachian COP	3	3			8	16				6			3	6	3	8		3	3		10		72
Auburn U			4	3	4	16				6			18	4	4					3			62
Belmont U					8	16	6			6			3	3		3			6	3	9		63
Binghamton U	4	3			8	16				5				3	3				2	3			47
Butler U-Indy			8		3	16								4	3								34
Butler U-Online			8		3	16								4	3								34
California Northstate U		3			7	15	3			3				3							6		40
Campbell U			4		4	15				6			12	3	4	4				3		8	63
Cedarville U			Req		Req	Req	Req			Req				Req	Req	Req					18		Req
Chapman U	4	4			7	16	3		3	3				3	3				3	3	6		58
Chicago State U			6		8	16	3		3	6				3		3			3	3			54
Concordia U Wisconsin					8	16	3			3				3		3		5		3	12		56
Creighton U-Distance	3				8	16	3		3	6							3				18	3	63
Creighton U-Omaha, NE	3				8	16	3		3	6							3				18	3	63
Creighton U-Phoenix, AZ	3				8	16	3		3	6							3				18	3	63

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Drake U					8	16	3			6				3	3					3	22		64
Duquesne U			6		8	16		3	3	6	3		15	4			3			3			70
D'Youville U					12	16	3		3	6				4		4				3	9		60
D'Youville U Online					12	16	3		3	6				4		4				3	9		60
East Tennessee St U		4			4	16	3			6			3	3	4			3	6	3	6		61
Fairleigh Dickinson U			8		8	16				3				3		4				3	21		66
Ferris St U			8		8	16	3			6			9	3	3				3	3			62
Florida A&M U			8	3	8	16				6			6	8	4	8			6	3	6		82
Harding U					8	16	3		3	6				4	4			8	3	3	6		64
High Point U		4			4	16	3			6			6	3	4						16		62
Howard U			6	4	3	16	3			6			3	4	4	4			3		3		59
Husson U			8		8	16								3						3			38
Idaho St U			8	3	4	16			3					3	4	3				3		25	72
Idaho St U - AK			8	3	4	16			3					3	4	3				3		25	72
Keck Graduate Inst	4	4			8	16							6	8		3		6	6				61
Larkin U			6		8	16				3			6	3				6		3	9		60
Lebanese American U		8	4	4	4	11		2		6					3					3	15	4	64

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LECOM - FL					8	16			3	6				3		3			3	3	9		54
LECOM - Online						16			3	6				3		3			3	3	9		46
LECOM - PA					8	16			3	6				3		3			3	3	9		54
Lipscomb U					8	16	3			6				3	4					3	18		61
Loma Linda U					8	16				6			12			4			12				58
Long Island U			8		8	16	3		3	6			6	4	4	4	3			3		1	69
Manchester U			3		3	12	3		3	3				3	3					3	9	12	57
Manchester U-Distance			3		3	12	3		3	3				3	3					3	9	12	57
Marshall B Ketchum U	3	3			6	12	3		3	3				3	3		3						42
Marshall U	4	4			8	16				6				3	4	4			3	3			55
MCPHS - Boston BS/BA Holders			3		7	15				6				3	4	3	3		3	3	15		65
MCPHS - Boston Early Assurance			3		7	15				6				3	4	3	3		3	3	15		65
MCPHS - Boston Transfer Students			3		7	15				6				3	4	3	3		3	3	15		65
MCPHS - Manchester			3		7	15			3	6				6	3	3	3		3	3	12		67
MCPHS - Worcester			3		7	15			3	6				6	3	3	3		3	3	12		67
Med C Wisconsin					12	15	3			3				3						3	12		51
Med U South Carolina	3	3			8	16	3			6				3	3	3	3			3	9		63

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy*	Physiology*	Anatomy & Physiology*	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Mercer U			6		8	16	3		3	6			6	3	3				6	3			63
Midwestern U - AZ	3				8	16	3		3	6				3		3			6	3	8		62
Midwestern U - IL	3				8	16	3		3	6				3		3			6	3	8		62
NEOMED U			3	3	8	16				6				3	3	3				3	12		60
North Dakota St U			8	6	8	15	3		3	9			6	4	5	3			3	3		8	84
Northeastern U - BS/BA Holders			7	3	7	15							4	3									39
Northeastern U - Dual			7	3	7	15							4	3									39
Northeastern U - Early Assurance			7	3	7	15							4	3									39
Northeastern U - Transfer Students			7	3	7	15				4				3			4						43
Notre Dame Maryland U			6		8	16	3			6				3	4	3				3			52
Nova Southeastern U			6		8	16	3			6			3	3		3		6	3		9		66
Ohio Northern U			8		4	16								3		3				3			37
Ohio St U, The		3		3	3	17								4	3					3			36
Oregon St U		4		4	8	16			3					3	3					3			44
Pacific U Oregon			8		8	16	3		3	6			3	3	3	3	3		3				62
Palm Beach Atlantic U			8	3	8	16	3			6				3	4					3	9		63
PCOM - GA			4		8	16				6			3	3					3		17		60

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy*	Physiology*	Anatomy & Physiology*	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
Presbyterian C			6		8	16				6			6	3	4	3			3	3			58
Purdue U			8	3	11	16	3		3	3				3	4	4				3		3	64
Regis U	3	3			12	16	3			3				3					6		6		55
Roosevelt U			5		6	12	3		3	6			9	3		3				3			53
Rosalind Franklin U Med Sci			3		6	12				6				3	3					3	15		51
Roseman U Hlth Sci	3	3				16	3			3				3	3						26		60
Rutgers U		3			9	18			3	6				4		7			3	3	12		68
Saint Josephs U Philadelphia			6		8	16	3		3	6			6	3	4	4			3	3			65
Samford U			8			16	3			6			6	4	4				3	3	9	2	64
Shenandoah U			6		14	12			3	6			3	3	3	3			3	3			59
Shenandoah U-Online			6		14	12			3	6			3	3	3	3			3	3			59
South College (TN) - On Campus			8		8	16	3		3	6			9	3	4				6	3			69
South College (TN) - Online			8		8	16	3		3	6			9	3	4				6	3			69
South Dakota St U	4	4			3	16	3		3	6				5	4					3			51
South U - GA			6		4	16				3				3				16			12		60
Southern Illinois Edwardsville			8		8	16	3		3	6				4	3	4			3	3	3		64
Southwestern Oklahoma St U	4				4	18	3	3	3	6			12	3	5	3	3						67

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
St. John Fisher C					12	16	3		3	6				3		4				3	12		62
St. John Fisher C Online					12	16	3		3	6				3		4				3	12		62
St. John's U			3	5	3	12	3			3	3		21	3						3		8	67
Sullivan U			3		4	16	2			6				3	4					3	21		62
Temple U			6		8	16			3	3			9	4		4			9	3			65
Texas A&M U					11	16	3			6			3	3	4	4			3	3		15	71
Texas Southern U			4		8	16				6				10	4	4			3			30	85
Texas Tech U HSC					8	16	3			6			15	4	4	4				3		3	66
Thomas Jefferson U			8		8	16				3			9	3	4	4			9		8		72
Touro C - NY	4	4		3	8	16	3		3	3			6	3	4	4			6				67
Touro U - CA		3				16								3	4								26
U at Buffalo	3	3		3	8	16				6				3	3				3	3			51
U of Arizona, The			8		4	16				6			9	3	4	3			6	3			62
U of Arkansas Med Sci					8	16								3	4			9				20	60
U of California, Irvine		3		3	3	16	3		3	3				3			3			3			43
U of California, San Diego		3			8	16	3		3	6				3		3			3				48
U of California, San Francisco		3			8	16	3		3	5				3	3				3	3		10	60

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
U of Charleston	4	4			8	16			3	6			3	3	4				3	2			56
U of Cincinnati			8	3	5	20				6				4	4	4				3	15		72
U of Colorado		4		3	8	16				3			8	3	2								47
U of Connecticut			8	4	4	14			3	4				4	4	4			3				52
U of Findlay, The			8		4	16				6				4		4				3	18		63
U of Findlay, The - Distance			8		4	16				3				4		4				3	18		60
U of Florida			8	4	8	16								4	3					3			46
U of Georgia			6	3	8	16	3		3	6				3	3				6	3		9	69
U of Hawaii Hilo			8		8	16	3		3	6			6	3	4				6			3	66
U of Houston					11	16				6			18	4	4	3			3	3		3	71
U of HS & Pharm in St. Louis			8	3	8	16	3			6			3	3	3				3	3			59
U of Illinois Chicago			6	3	6	12	3			3			3	3	3	3			3	3		3	54
U of Iowa, The	3	3		3	8	14				4				4	4	3				3	16		65
U of Kansas, The	3	4			3	16	3			6				3	4	4				3		12	61
U of Kentucky	3	3			4	16	3			6				4	4					3	21	3	70
U of Louisiana Monroe, The			7	3	6	16	3		3	6			6	3	4	4			3	3			67
U of Maryland			6		8	16	3		3	3				3	4	4				3	12		65



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U of Maryland Eastern Shore			8		4	16	3		3	6			6	4	4	4				3			61
U of Michigan	3	3		3	9	12				3			6	3	3	3			6	3			57
U of Minnesota	3	3			6	12	3			3				3	3	3			6	3			48
U of Mississippi, The	4	4		3	12	16	3		3	6	3		12	3	3	4			6	3			85
U of Missouri-Kansas City	4				9	16	3			6			3	3	4	4				3		1	56
U of Montana			6		4	18	3			3				4		5			3	4	14		64
U of Nebraska Med Ctr	4	4			4	16								4		4				3	21		60
U of New England			8		4	16	3			3			6	3	3				9		3	3	61
U of New Mexico, The			6		8	16	3		3	6				3	4					3	24	3	79
U of North Carolina Chapel Hill			4	3	4	15								3	3	4				3			39
U of North Texas HSC	4				11	16	3			6			15	3	4	4			3	3			72
U of Oklahoma, The					8	16				6				3	4	3					24		64
U of Pittsburgh					8	16				6			9	3					9	3	6		60
U of Puerto Rico			6		6	16	3		3	6		6	6	11		8	3		6				80
U of Rhode Island, The			8	3	4	16	3		3	3	3			3	4					4			54
U of Saint Joseph			8			16			3	3				3	4	4				3			44
U of South Carolina			6		8	16	3		3	6			9	3	3	3	3			3			66

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
U of South Florida			8	3	14	16			3	3			9	3	3	4			3	3			72
U of Southern California		3		3	8	16								4	3								37
U of Tennessee, The			8		8	16	3			6			6	3	3				6	3			62
U of Texas Austin, The					9	16				3			3	3	4	4				3		24	69
U of Texas El Paso, The			8		9	16	3			6			18	3	4	3			3	3		3	79
U of Texas Tyler, The			8		8	16	3							3	4								42
U of the Incarnate Word			8		4	16	3			6			12	3	4	4			3	3	2		68
U of the Pacific		4			8	16	3		3	6			6	4	3	4	3				28		88
U of Toledo, The		3			4	12				6				3		3				3			34
U of Utah	3	3				16	3							3	3	3				3	3		40
U of Washington			6	4	8	16	3		3	6			3	3	4				3	3			62
U of Wisconsin - Madison		3			7	16				3				3	3	3				3	12	19	72
U of Wyoming	4	4		4	8	16								4	4					4			48
Union U			8		8	16	3			6				3	4			4		3	6		61
Virginia Commonwealth U	3	3		3	8	16				6				3	3	4				3			52
Washington St U	4	4		4		8							12	3	4					3			42
Wayne St U			6	4	4	20	3			6				4	5	4				3		15	74

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy*	Physiology*	Anatomy & Physiology*	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
West Coast U	3	3		3	8	16	3		3	6				3	3				3	3	6		63
West Virginia U		3		3	8	16	3		3	6				3	3					3	9		60
Western New England U			Req		Req	Req				Req				Req	Req				Req	Req			Req
Western New England U-Distance			Req		Req	Req				Req				Req	Req				Req	Req			Req
Western U Hlth Sci		3		3	3	16	3			6				3								6	43
Wilkes U					8	16	3		3					4		3				3			40
William Carey U			8		8	16	3		3	6				3		3			6	3	9		68
Wingate U			4		4	16				6				3	4					3	12		52
Xavier U Louisiana					8	16	3			6	3		3	4	4	4			3	3			57

2023-2024 Pharm.D. Degree Programs in the U.S.	Anatomy *	Physiology *	Anatomy & Physiology *	Biochemistry	Biology/Biological Science	Chemistry	Communication / Speech (Verbal)	Computer Science	Economics	English Composition / Writing	Ethics	Foreign Language	Humanities	Math	Microbiology	Physics	Psychology	Science/Math Elective(s)	Social/Behavioral Science	Statistics	General Elective(s)	Other	Grand Total
<b>Grand Total # of Semester Hours for All Schools</b>	116	153	537	143	1094	2480	266	8	195	709	15	6	476	531	398	328	61	66	308	362	877	308	9419
<b># of Programs with Course Prerequisite in Subject</b>	34	44	84	43	152	159	88	3	65	135	5	1	64	154	111	89	20	10	72	120	72	34	
<b>% of Programs with Course Prerequisite in Subject</b>	21%	27%	52%	26%	93%	98%	54%	2%	40%	83%	3%	1%	39%	94%	68%	55%	12%	6%	44%	74%	44%	21%	
<b>Mean # of Semester Hours Required in Course Subject**</b>	3.4	3.5	6.4	3.3	7.2	15.6	3.0	2.7	3.0	5.3	3.0	6.0	7.4	3.4	3.6	3.7	3.1	6.6	4.3	3.0	12.2	9.1	59.2
<b>Median # of Semester Hours Required in Course Subject**</b>	3	3	7	3	8	16	3	3	3	6	3	6	6	3	4	4	3	6	3	3	12	6	61

\* Most colleges and schools of pharmacy (80%) require one or more courses in anatomy and/or physiology and will accept separate courses OR combined A&P I and II courses. Labs requirements vary. Visit the PharmCAS School Directory for school-specific details.

\*\* The mean and median calculations only include programs with one or more course prerequisites in the subject.

\*\*\* Please refer to the PharmCAS School Directory for additional details.

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Some colleges and schools of pharmacy have more than one pathway or campus for Pharm.D. degree students.