

PRE-PHARMACY CONCENTRATION

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Pre-pharmacy requirements for individual pharmacy schools vary. Therefore, it is important to identify and complete those courses required and/or recommended by the schools to which you intend to apply. Many students applying to pharmacy programs will have completed their B.S. degree and are highly competitive. Applications are facilitated through the <u>PharmCAS</u> application. The PCAT exam is required for application to most Pharmacy programs. The two pharmacy programs in Colorado at University of Colorado Health Sciences Center and at Regis are entry-level Pharm. D. Programs.

Information on the CU Skaggs Pharmacy program can be found at <u>https://pharmacy.cuanschutz.edu/academics/pharmd</u>

Regis Pharmacy program information is at: https://www.regis.edu/academics/majors-and-programs/application-requirements/pharmacy-pharmd

B.S. in Biology with Pre-Pharmacy concentration—Course requirements

	Course Name	Credits	Semester
Biology Core Cours		30	
BIOL171	First Year Seminar	1	
BIOL 181/L	College Biology I-Diversity	4	
BIOL182/L	College Biology II-Cellular	4	
BIOL 201/L OR	Botany/Lab (S) OR		
BIOL 202/L	Zoology/Lab (F)	4	
BIOL 301/L	General Microbiology/Lab	5	
BIOL 412/L OR	Cellular Biology/Lab (S)		
BIOL 413/L OR	Plant Physiology/ Lab (SO)		
BIOL414/L	Vertebrate Physiology/Lab* (F)	4	
BIOL 350	Mendelian and Population Genetics	2	
BIOL 351	Molecular Biology and Genetics	2	
BIOL 352	Evolutionary Biology & Ecology	3	
BIOL 493	Senior Seminar (upon completion of core)	1	
BIOL 311 or 411	Biochemistry (F)	3	
	Advisor Approved Upper Division See	40	
Biology Electives	Electives* List	12	
NOTE. The following	NOT he used as cleatives in the f	Dialami maia	
	g courses may NOT be used as electives in the E	•••••••••••••••••••••••••••••••••••••••	
BIOL 100/L, 112,	<u>121, 121L, 206/L, 223/L, 224/L, 291, 294, 394, 49</u> Total Biology Credits	494, 490, 45	anu 490.
Science and Math	Support Courses	Crodite	Semester
		Credits	Semester
CHEM 121/L	General Chemistry I/Lab*	5	Semester
CHEM 121/L CHEM 122/L	General Chemistry I/Lab* General Chemistry II/Lab	5 5	Semester
CHEM 121/L CHEM 122/L CHEM 301/L	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab*	5 5 5	Semester
Science and Math S CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab	5 5 5 5	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab*	5 5 5 5 4	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab	5 5 5 5	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab*	5 5 5 5 4	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab* Principles of Physics II/Lab	5 5 5 5 4 4	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics	5 5 5 4 4 4 4	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits	5 5 5 4 4 4 4 3	Semester
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses	5 5 5 4 4 4 4 3 35 Credits	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry II/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Courses Rhetoric & Writing/English Composition I	5 5 5 4 4 4 3 3 35 Credits 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab* Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II	5 5 5 4 4 4 3 3 35 Credits 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab* Organic Chemistry I/Lab* Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended)	5 5 5 4 4 4 3 3 35 Credits 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended) Humanities	5 5 5 4 4 4 3 3 35 Credits 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab* Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended) Humanities Speaking and Listening	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102 COMR 103	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab* Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended) Humanities Speaking and Listening Social Science	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102 COMR 103	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities Speaking and Listening Social Science Principles of Macro or Microeconomics	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102 COMR 103	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities Speaking and Listening Social Science Principles of Macro or Microeconomics	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102 COMR 103	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities Speaking and Listening Social Science Principles of Macro or Microeconomics	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102 COMR 103 ECON 201 or 202	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended) Humanities Speaking and Listening Social Science Principles of Macro or Microeconomics History	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L CHEM 302/L PHYS 201/L PHYS 202/L MATH 221 MATH 156 General Education ENG 101 ENG 102 COMR 103 ECON 201 or 202 Pre-pharmacy requ	General Chemistry I/Lab* General Chemistry II/Lab Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab* Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended) Humanities Speaking and Listening Social Science Principles of Macro or Microeconomics History	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	
CHEM 121/L CHEM 122/L CHEM 301/L	General Chemistry I/Lab* General Chemistry I/Lab* Organic Chemistry I/Lab* Organic Chemistry I/Lab* Organic Chemistry I/Lab Principles of Physics I/Lab Principles of Physics I/Lab Applied Calculus Intro to Statistics Total support Credits Courses Rhetoric & Writing/English Composition I Rhetoric & Writing/English Composition II Humanities (Philosophy recommended) Humanities Speaking and Listening Social Science Principles of Macro or Microeconomics History Total General Education	5 5 5 4 4 4 3 3 3 5 Credits 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	

Students completing a B.S. in another major should consult the catalog for major requirements.

Courses	Course Name	Cr.	Semester
CHEM 121/122/L	General Chemistry I & II/Labs	10	
CHEM 301/302/L	Organic Chemistry I & II/Labs	10	
CHEM 311 or 411	Biochemistry	3	
BIOL 181/182/L	College Biology I & II/Labs	8	
BIOL 301 (301L)	General Microbiology (Lab optional)	3 or 5	
BIOL 223/224/L	Human Anatomy & Physiology I & II	8	
	With Labs		
PHYS 201/L and 202/L	Physics I and II/ Labs	8	
MATH 221 or	Applied Calculus or	4-5	
MATH 126	Calculus & Analytical Geometry I		
ENG 101/102	Rhetoric & Writing/	6	
	English Composition I & II		
COMR 103	Speaking and Listening	3	
ECON 201 or 202	Principles of Macro or Microeconomics	3	
Humanities &	See Catalog for specific courses	9	
Social Science			
General Education	See Catalog for specific courses	9	

Specific Pre- Pharmacy requirements for application to Regis University PharmD program:

Courses	Course Name	Cr.	Semester
CHEM 121/122/L	General Chemistry I & II/Labs	10	
CHEM 301/302/L	Organic Chemistry I & II/Labs	10	
BIOL 181/182/L	College Biology I & II/Labs	8	
BIOL 300+	Upper division Biology & Lab	4	
BIOL 223/224/L	Human Anatomy & Physiology I & II/Labs	8	
MATH 221 or	Applied Calculus or	4-5	
MATH 126	Calculus & Analytical Geometry I		
ENG 101	Rhetoric & Writing/English Composition I	3	
COMR 103	Speaking and Listening	3	
ECON 201 or 202	Principles of Macroeconomics or	3	
	Microeconomics		
Social Sciences	See Catalog for specific courses	6	
	(Psychology and Sociology		
	recommended)		
General Electives	See Catalog	9	
	(Philosophy recommended)		