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MAJOR B.S. — **BIOLOGY** (Concentration in Biomedical Research)

HMNP 102 (grade of C- or better in WRT 101 is required)	GENERAL EDUCATION REQUIREMENTS (32-36 semester hours)	MAJOR COURSES (71-72 semester hours)							
Writing and Critical Thinking:		Check	Hrs.	Course & No.	Hrs.	Check		B) Select two of the following	; :
WRIT 101 (grade of C - or better is required)	ACAD 101 (Required of first-time freshmen only)		1	BIOL 202	(0)			BIOL 519, 522, 555, 557 or 560	
HMNP 102 (grade of C- or better in WRT 101 is required)	Writing and Critical Thinking:			BIOL 203	(1)			CHEM 523/525	
CRTW 201 (grade of C or better in HIMNP 102 is required)	WRIT 101 (grade of C- or better is required)		3	BIOL 204	(3)			,	(6-8)
Oral Communication (met in major with BIOL 490) 0 BIOL 300 (4) CHEM 105 (4) Chem 106-108 (4) Chem 106-108 (4) BIOL 480 (3) CHEM 106-108 (4) BIOL 490 (4) Constitution Requirement (see approved list; may be met by other req.) 0-8 BIOL 491 (0) CHEM 302-304 (4) Chem 106-108 (4) BIOL 491 (0) CHEM 302-304 (4) Chem 106-108 (4) BIOL 491 (0) CHEM 302-304 (4) Chem 106-108 (4) BIOL 491 (0) CHEM 302-304 (4) Chem 106-108 (4) BIOL 491 (0) CHEM 302-304 (4) Chem 106-108 (4) BIOL 491 (0) CHEM 302-304 (4) Chem 106-108 (4) Chem 1	HMXP 102 (grade of C- or better in WRIT 101 is required)		3	BIOL 205	(4)			C) BIOL 471 or BIOL 450H	(3)
Technology (met in major with BIOL 300 & 480)	CRTW 201 (grade of C- or better in HMXP 102 is required)		3	BIOL 206	(4)			D)	()
Intensive Writing (met in major with BIOL 300)	Oral Communication (met in major with BIOL 480)		0	BIOL 300	(4)			CHEM 105	(4)
BIOL 491 (0)	Technology (met in major with BIOL 300 & 480)		0	BIOL 315	(4)			CHEM 106-108	(4)
Physical Activity (see approved list)	Intensive Writing (met in major with BIOL 300)		0	BIOL 480	(3)			CHEM 301	(4)
A BIOL	Constitution Requirement (see approved list; may be met by other req.)			BIOL 491	(0)			CHEM 302-304	(4)
A BIOL			0-3	BIOL 492	(0)			MATH*	(3-4)
B) Select one from the following PHIL 230 (3)	Physical Activity (see approved list)			A) BIOL	_ (3-4)		(must have a lab)	*Excluding MATH 291 and 2	.92
B) Select one from the following PHIL 230 (3) BIOL 310 or 317 or 322 (4) BISIOL 310 or 317 or 322 (4) BISIOL 310 or 317 or 322 (4) BIOL 303, 304, 323, 403, 508, 510, 511, 515, 525, 552A, 552B Non-Lab courses: BIOL 303, 304, 323, 403, 508, 510, 511, 515, 525, 552A, 552B Non-Lab courses: BIOL 309, 404, 505, 513, 518, 524, 551, 560 B. Cells, Genes and Developmental Biology (satisfied by the required program): C. Other: Students must complete two semesters of undergraduate research, but only 3 hours will count toward the 42 hours of BIOL 472 during the second semester of research and these hours will count toward the 120 hours needed for the degree. A paid summer research position may count as one semester if approved by the Department Chair. D. Additional Science Electives: select a minimum of 3 hours from the following: CHEM (except 101, 104, 461, 462, or 463); GEOL; MATH (except 291 & 292 and any course used to satisfy the Quantitative Skills Area); PHYS (except 101/102); QMTH 205 or 210 (if MATH 141 not selected). ELECTIVES (4-14 semester hours) C. ELECTIVES (4-14 semester hours) C. ELECTIVES (4-14 semester hours) C. Other: Students must complete two semesters of undergraduate research, but only 3 hours will count toward the 120 hours needed for the degree. A paid summer research position may count as one semester if approved by the Department Chair. D. Additional Science Electives: D. Additional Science Electives: C. Other: Students must complete two semesters of undergraduate research, but only 3 hours will count toward the 120 hours needed for the degree. A paid summer research po			1	A) BIOL	_ ()			MATH 201	(4)
Historical Perspectives (see approved list) Social Science (see approved list; must include 2 designators) Humanities and Arts (see approved list; must include 2 designators) Humanities and Arts (see approved list; must include 2 designators) Humanities and Arts (see approved list; must include 2 designators) A. Ecology, Evolution and Field Biology (select two courses, one of which must include a lab): Lab courses: BIOL 303, 304, 323, 403, 508, 510, 511, 515, 525, 552A, 552B Non-Lab courses: BIOL 309, 404, 505, 513, 518, 524, 551, 560 B. Cells, Genes and Developmental Biology (satisfied by the required program): C. Others Students must complete two semesters of undergraduate research, but only 3 hours will count toward the 42 hours of BIOL courses required for the BS degree in Biology. Student will enroll for BIOL 472 during the second semester of research and these hours will count toward the 120 hours needed for the degree. A paid summer research position may count as one semester if approved by the Department Chair. D. Additional Science Electives: select a minimum of 3 hours from the following: CHEM (except 101, 104, 461, 462, or 463); GEOL; MATH (except 291 & 292 and any course used to satisfy the Quantitative Skills Area); PHYS (except 101/102); QMTH 205 or 210 (if MATH 141 not selected). FOREIGN LANGUAGE (3-8 semester hours) ELECTIVES (4-14 semester hours) ELECTIVES (4-14 semester hours)	Global Perspectives (see approved list)							PHIL 230	(3)
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Social Science (see approved list; must include 2 designators) Social Science (see approved list; must include 2 designators)	Historical Perspectives (see approved list)								
Social Science (see approved list; must include 2 designators) Social Science (see approved list; must include 2 designators)			3	Biology Areas an	d Electives	S			
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S-4 by the Department Chair.	Natural Science (partially met in major with BIOL 203/204)				-				
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- 1. Unless stated otherwise, a single course may not be used for more than one General Education requirement or in a major and a minor.
- 2. All Arts and Sciences majors require a minimum of 40 hours in courses numbered above 299.
- 3. Attendance at three cultural events is required for each 20 hours completed in residence at Winthrop. Note exceptions in the undergraduate catalog.
- 4. Designators that differ only for the purpose of theory and application will be considered the same designator.
- 5. Complete WRIT 101, HMXP 102 and CRTW 201 with a C- or better by 75 hours.
- 6. See complete catalog requirements at www.winthrop.edu/recandreg