

SCIENCE COURSES: THE BASICS

1. The following classes satisfy the core requirements (i.e., '44 hour block'): BIO 110, 111, 112, 120, 130, 140, 140A
CHM 131, 131A, 132, 151, 152
PHY 110, 110A
2. The following classes can be used as electives, but CANNOT be used to satisfy the core requirements: BIO 163, 168, 169, 175
3. Students cannot get credit for both BIO 110 and BIO 111. Students who have had either BIO 110 or BIO 111 may take any of the Biology core courses (see 1, above), or CHM 131/131A or PHY 110/ 110A for their second science class.
4. The only reason for a student to take Bio 110 is that it is offered online; otherwise, BIO 111 is a better choice. Period.
5. Students planning to study biology or Natural Resources Management at WCU should take BIO 111 and BIO 112. If they elect not to take BIO 112, they will need BOTH BIO 120 and BIO 130 to substitute for BIO 112. As for other schools in the state, it's all over the place; have them come by and talk to the science faculty.
6. If and only if a student is planning to study elementary education, they need to take two science classes which are in two different fields, i.e., One BIO and one CHM, or one BIO and one PHY, or one CHM and one PHY.
7. Students majoring in pharmacy, chemistry, pre-med, pre-vet will need a CHM 151/152 sequence. Please have them talk to science faculty.
8. Students majoring in nursing, nutrition, or environmental health at WCU will need CHM 131/131A and CHM 132.
9. Make sure any student taking BIO 140, 140A, CHM 131, 131A, or PHY 110, 110A are enrolled in both the lecture and lab components (like ENG 090/090A).

SCIENCE COURSES: MORE DETAIL

Course Title	Course Number	Can be used for core requirement	Can be used for elective requirement	Prerequisite	Special comments
BIO 110	Principles of Biology	Yes	Yes	None	<ul style="list-style-type: none"> • Can not receive credit for both BIO 110 & BIO 111 • Designed for non-science majors
BIO 111	General Biology I	Yes	Yes	None	<ul style="list-style-type: none"> • Can not receive credit for both BIO 110 & BIO 111 • Suitable for science majors or non-majors • Part 1 of a 2 semester sequence
BIO 112	General Biology II	Yes	Yes	BIO 111	<ul style="list-style-type: none"> • Part 2 of a 2 semester sequence
BIO 120	Introductory Botany	Yes	Yes	BIO 110 or BIO 111	<ul style="list-style-type: none"> • Some universities may allow this course to apply toward a biology major. We recommend checking with the school. • WCU will count this course as our BIO 112 ONLY if accompanied by BIO 130
BIO 130	Introductory Zoology	Yes	Yes	BIO 110 or BIO 111	<ul style="list-style-type: none"> • Some universities may allow this course to apply toward a biology major. We recommend checking with the school. • WCU will count this course as our BIO 112 ONLY if accompanied by BIO 120
BIO 140	Environmental Biology	Yes	Yes	None	Students must co-register for BIO 140 A
BIO 140 A	Environmental Biology lab	Yes	Yes	None	Students must co-register for BIO 140
BIO 163	Basic Anatomy & Physiology	No	Yes	None	A 1 semester coverage of the human body
BIO 168	Anatomy & Physiology I	No	Yes	None	Part 1 of a 2-semester coverage of the human body
BIO 169	Anatomy & Physiology II	No	Yes	BIO 168	<ul style="list-style-type: none"> • *Part 2 of a 2-semester coverage of the human body. • Some allied health programs give special approval for students with credit in BIO 163 to take this course.
BIO 175	General Microbiology	No	Yes	BIO 110 or BIO 111 or BIO 163 or BIO 168	This course is most suitable for allied health students but some universities may provide credit toward a biology major
CHM 131	Introduction to Chemistry	Yes	Yes	MAT 070 or higher placement scores	Students must co-register for CHM 131A
CHM 131 A	Introduction to Chemistry Lab	Yes	Yes	MAT 070 or higher placement scores	Students must co-register for CHM 131
CHM 132	Organic & Biochemistry	Yes	Yes	CHM 131 and CHM 131A; or CHM 151	

CHM 151	General Chemistry I	Yes	Yes	MAT 080 or higher placement scores	This course is more suitable for chemistry or science majors; Part 1 of a 2 semester sequence
CHM 152	General Chemistry II	Yes	Yes	CHM 151	This course is more suitable for chemistry or science majors; Part 2 of a 2 semester sequence
PHY 110	Conceptual Physics	Yes	Yes	None	Students must co-register for PHY 110A
PHY 110 A	Conceptual Physics lab	Yes	Yes	None	Students must co-register for PHY 110