

Articulation Agreement by Major
Effective during the 14-15 Academic Year

To: **San Francisco State**From: **Los Medanos College**

14-15 General Catalog

Semester

14-15 General Catalog

Semester

====Biology: Concentration in Cell & Molecular Biology, B.S.====

Second year written composition is a prerequisite to the upper division
Graduation Writing Assessment Requirement (GWAR) course in the major.

ENG 214	Second Year Written Composition-English	(3)	ENGL 221	Advanced Composition and Critical Thinking	(3)
			<u>OR</u>		
			ENGL 230	Thinking and Writing Critically About Literature	(3)

A minimum grade of C is required.

OR

OR

An Equivalent Course: Although not articulated to SF State's English 214, the following course(s) will satisfy SF State's Second Year Composition Requirement, which is a prerequisite for the Graduation Writing Assessment Requirement (GWAR). (Effective Fall 2014 for new students, this is known as the Written Communication II requirement for SF State's Lower Division General Education.)

Second Year Composition Requirement:	ENGL 220	Critical Inquiry and Analysis	(3)
	<u>OR</u>		
	ENGL 221	Advanced Composition and Critical Thinking	(3)

A minimum grade of C is required.

BIOL 230	Introductory Biology I	(5)	BIOSC 20	Principles of Biology: Cellular Processes	(5)
BIOL 240	Introductory Biology II	(5)	BIOSC 21	Principles of Biology: Organismal	(5)
CHEM 115	Gen Chem I: Essential Concepts of Chemistry	(5)	CHEM 25	General College Chemistry	(5)
CHEM 215	Gen Chem II: Quant Appl of Chem Concepts	(3)	CHEM 26	General College Chemistry	(5)
CHEM 216	General Chemistry II: Laboratory	(2)	CHEM 26	General College Chemistry	(5)
CHEM 233	Organic Chemistry I	(3)	CHEM 28	Organic Chemistry	(5)

Questions regarding this agreement may be directed to artic@sfsu.edu.

To: San Francisco State, From: Los Medanos College, 14-15

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Biology: Concentration in Cell & Molecular Biology, B.S. (continued)

MATH 226	Calculus I	(4)		MATH 50	Calculus and Analytic Geometry I	(4)
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PHYS 111	General Physics I	(3)		PHYS 35	College Physics I	(4)
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PHYS 112	General Physics I Laboratory	(1)		PHYS 35	College Physics I	(4)
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PHYS 121	General Physics II	(3)		PHYS 36	College Physics II	(4)
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PHYS 122	General Physics II Lab	(1)		PHYS 36	College Physics II	(4)
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One course from the following:

CSC 210	Introduction to Computer Programming	(3)		COMSC 48	Introduction to C++ Programming Part II	(3)
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OR

				COMSC 122	Programming and Methodologies I	(3)
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OR

MATH 227	Calculus II	(4)		MATH 60	Calculus and Analytic Geometry II	(4)
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Students who plan to study for a PhD should complete at least two semesters of calculus and one semester of physical chemistry.

Some majors include lower division prerequisites that require minimum grades as high as C. Check the San Francisco State University Bulletin (catalog) for exact prerequisite information, course descriptions, and any other requirements for this major: <http://bulletin.sfsu.edu>**END OF MAJOR**Questions regarding this agreement may be directed to artic@sfsu.edu.