Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Channel Islands 2022-2023 General Catalog, Semester	From: American River College 2022-2023 General Catalog, Semester

Computer Science, B.S.

GENERAL INFORMATION

1. **Special Grade Requirement:** A grade of "C-" or better is required in all prerequisite courses in the Computer Science Major.

LOWER DIVISION REQUIREMENTS

Please refer to additional important General Information section above

COMP 150 - Object-oriented Programming (4.00)	←	**CISP 400** - Object Oriented Programming with C++ (4.00)
		--- Or ---
		CISP 401 - Object Oriented Programming with Java (4.00)
COMP 151 - Data Structures and Program Design (4.00)	←	**CISP 430** - Data Structures (4.00)
COMP 162 - Computer Architecture and Assembly Language (3.00)	←	**CISP 310** - Assembly Language Programming for Microcomputers (4.00)
COMP 232 - Programming Languages (3.00)	←	No Course Articulated
COMP 262 - Computer Organization and Architecture (3.00)	←	No Course Articulated

MATH 150 - Calculus I (4.00)	←	**MATH 400** - Calculus I (5.00)
		--- Or ---
		MATH 355 - Calculus for Biology and Medicine I (4.00)
MATH 151 - Calculus II (4.00)	←	**MATH 401** - Calculus II (5.00)

MATH 240 - Linear Algebra (3.00)	←	**MATH 410** - Introduction to Linear Algebra (3.00)

SCIENCE

Select 1 Sequence(s) from the following
Please refer to additional important General Information section above

PHYS 200 - General Physics I (4.00)	←	**PHYS 410** - Mechanics of Solids and Fluids (5.00)
PHYS 201 - General Physics II (4.00)	←	**PHYS 421** - Electricity and Magnetism (4.00)

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CSU GE Area: B2 - Life Science	←	**BIOL 332** - Introduction to Ornithology (4.00) Same-As: NATR 301
• *Maximum credit, one course*		**NATR 320** - Principles of Ecology (4.00)
		NATR 302 - Introduction to Wildlife Biology (4.00)
		ANTH 300 - Biological Anthropology (3.00)
		BIOL 370 - Marine Biology (4.00)
		BIOL 342 - The New Plagues: New and Ancient Infectious Diseases Threatening World Health (3.00)
		BIOL 352 - Conservation Biology (3.00)
		NATR 310 - Study Design and Field Methods (4.00)
		NATR 306 - Introduction to Rangeland Ecology and Management (3.00)
		ANTH 480 - Honors Biological Anthropology (3.00)
		BIOL 300 - The Foundations of Biology (3.00)
		PSYC 310 - Biological Psychology (3.00)
		BIOL 305 - Natural History (4.00)
		ANTH 303 - Introduction to Forensic Anthropology (3.00)
		BIOL 301 - Evolution (3.00)
		BIOL 310 - General Biology (4.00)
		BIOL 303 - Survey of Biology (4.00)
		NATR 305 - Fisheries Ecology and Management (4.00)
		BIOL 440 - General Microbiology (4.00)
		BIOL 400 - Principles of Biology (5.00)
		BIOL 420 - Principles of Zoology (5.00)
		BIOL 482 - Honors Marine Biology (4.00)
		BIOL 410 - Principles of Botany (5.00)
		BIOL 430 - Anatomy and Physiology (5.00)
		BIOL 442 - General Microbiology and Public Health (5.00)
		BIOL 415 - Introduction to Biology: Biodiversity, Evolution, and Ecology (5.00)
		HEED 308 - Environmental Health Science (3.00)
		BIOL 375 - Marine Ecology (3.00)

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PHYS 200 - General Physics I (4.00)	←	**PHYS 410** - Mechanics of Solids and Fluids (5.00)
BIOL 200 - Principles of Organismal and Population Biology (4.00)	←	**BIOL 415** - Introduction to Biology: Biodiversity, Evolution, and Ecology (5.00)
		--- Or ---
		BIOL 410 - Principles of Botany (5.00)
		--- And ---
		BIOL 420 - Principles of Zoology (5.00)
BIOL 212 - Neurobiology and Cognitive Science (3.00) Same-As: PSY 212	←	**PSYC 310** - Biological Psychology (3.00)

UPPER DIVISION REQUIREMENTS

MATH 300 - Discrete Mathematics (3.00)	←	**CISP 440** - Discrete Structures for Computer Science (3.00)
• *Content credit only*		• *Course is an approved substitute for Computer Science majors only*
• *Lower division credit only*		• *Course is an approved substitute for Information Technology majors only*

END OF AGREEMENT