

Biology Articulation Committee Meeting, May 9th and 10th, 2023

University of British Columbia Okanagan Campus, Kelowna B.C.

Report from (institution)

Articulation Rep: Thomas Flower

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Course # (credits)	Course Name (Descriptor)	Text	Projected Enrolment 2023/24	Hours (/week)	Pre-requisites	Notes	Course Instructor for (2023/24)
BIOL 104 (4)	Human Biology	- <i>Campbell Essential Biology with Physiology</i> Simon, Dickey, and Reece - Custom lab manual: Mader	210 (6 sections of 35 - 3 in Fall and 3 in Summer)	3 lect/ 3 lab	None	Non-majors <i>Fall 2022-87 enrolled</i> <i>Summer 2023-140 enrolled</i>	E. Chin S. Cornish B. Fessenden
BIOL 105 (4)	Environmental Biology	- <i>Environment: The Science Behind the Stories</i> , Withgott et al. - Custom lab manual:	105 (3 sections of 35 in Spring)	3 lect/ 3 lab	None	Non-majors <i>Spring 2023-110 enrolled</i>	B. Fessenden P. McMillan
BIOL 106/107 (1.5)/(4)	Introductory Biology I & II	- <i>Campbell Biology in Focus</i> , Reece et al - Custom lab manual: Mader/Dolphin	Will no longer be offered	4.5 lect/ 3 lab	None	<i>Replaced with BIOL 109</i>	Not offered
BIOL 109 (5.5)	Introductory Biology	- <i>Campbell Biology in Focus</i> , Reece et al - Custom lab manual: Mader/Dolphin	210 (6 sections of 35 - 3 in Fall and 3 in Summer)	4.5 lect/ 3 lab	None	Majors <i>Fall 2022 – 80 enrolled</i> <i>Summer 2023 – 105 enrolled</i>	T. Flower P. McMillan E. Pokrishevsky
BIOL 110 (4)	General Biology I	- <i>Campbell Biology in Focus</i> , Reece et al - Custom lab manual: Mader/Dolphin	105 (3 sections of 35 in Fall)	3 lect/ 3 lab	<i>Chem 11 or Chem 12 or equivalent</i>	Majors <i>Fall 2022 - 115 enrolled</i>	M. de Jong Westman E. Chu

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BIOL 111 (4)	General Biology II	-- <i>Campbell Biology in Focus</i> , Reece et al -Custom lab manual: Mader/Dolphin	210 (6 sections of 35) – 4 in Spring and 2 in Summer	3 lect/ 3 lab	Biol 110 or BIOL 106/107 or BIOL 109	Majors <i>Spring 2023 – 125 enrolled</i> <i>Summer 2023 - 65 enrolled</i>	P. McMillan E. Pokrishevsky
BIOL 112 (4)	Human Anatomy & Physiology I for Health Sciences	- <i>Human Anatomy & Physiology</i> , Marieb & Hoehn -Lab manual: Marieb	105 (3 sections of 35 in Fall)	3 lect/ 3 lab	None *Will change to Biology 12 (pass), BBIO 054, BIOL 104, BIOL 109, or BIOL 110 starting Summer 2023	Health Science Majors <i>Fall 2022– 96 enrolled</i>	M. Kiraly
BIOL 113 (4)	Human Anatomy & Physiology II for Health Sciences	- <i>Human Anatomy & Physiology</i> , Marieb & Hoehn -Lab manual: Marieb	70 (2 sections of 35 in Spring)	3 lect/ 3 lab	Biol 112	Health Science Majors <i>Spring 2023 - 52 enrolled</i>	M. Kiraly
BIOL 200 (3)	Genetics I	- <i>Genetics Essentials</i> . Pierce	35 (1 section of 35 in Fall)	3 lect	BIOL 111 (C-) and CHEM 111 (pass)	Majors <i>Fall 2022 – 19 enrolled</i>	E. Chu
BIOL 202 (3)	Nutrition	- <i>Understanding Nutrition: Canadian Edition</i> , Whitney et al.	70 (2 section in Summer)	3 lect	BIOL 113 (C-), or BIOL 111 (C-), and Chemistry 11	Health Science Majors <i>Summer 2023 – 62 enrolled</i>	E. Chin E. Pokrishevsky
BIOL 203 (4)	Introduction to Microbiology	- <i>Microbiology with Diseases by Body System</i> , Bauman -Lab manual: <i>Microbiology Laboratory Theory and Applications</i> , Leboffe & Pierce	35 (1 section of 35 in Spring)	3 lect/ 3 lab	BIOL 111 (C-)	Majors <i>Spring 2023 - 34 enrolled</i>	E. Chu

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BIOL 208 (4)	Ecology	- <i>Ecology: The Economy of Nature</i> . Ricklefs & Relyea, -Lab text: <i>Plants of Coastal British Columbia</i> , Pojar & Mackinnon -Custom lab manual:	35 (1 section of 35 in Fall)	3 lect/ 3 lab	BIOL 111 (C-)	Majors <i>Fall 2022 - 21 enrolled</i>	T. Flower
BIOL 209 (3)	Fundamentals of Physiology	- <i>Campbell: Biology Canadian Edition</i> . Urry et al.	140 (2 section of 35 in Fall and 2 in the Summer)	3 lect	BIOL 111 (C-)	Majors <i>Fall 2022 – 35 enrolled</i> <i>Summer 2023 - 33</i>	E. Chin
BIOL 210 (4)	Morphology of Vascular Plants	<i>TBD</i>	Not offered	3 lect/ 3 lab	BIOL 106, 107 and 111 or BIOL 110 and 111 with a minimum C- grade	Majors *Not planned to be offered in the future. Replaced by BIOL 230	Not offered
BIOL 212 (4)	Invertebrate Zoology	- <i>Integrated Principles of Zoology</i> (custom text). Hickman, et al. - Custom lab manual: <i>Laboratory Studies in Integrated Principles of Zoology</i> , Hickman, et al.	Not offered in 2023/24	3 lect/ 3 lab	BIOL 111 (C-) grade	Majors <i>Spring 2023 - 25 enrolled</i> Offered alternate years: next offering 2024/25 Spring	M. de Jong Westman
BIOL 213 (4)	Vertebrate Zoology	- <i>Functional Anatomy of the Vertebrates: An Evolutionary Perspective</i> , Liem, et al. -Lab manual: <i>Manuel of Vertebrate Dissection Comparative Anatomy</i> , Fishbeck & Sebastiani	35 (1 section of 35 in Fall)	3 lect/ 3 lab	BIOL 111 (C-) grade	Majors <i>Fall 2021 –30 enrolled</i>	M. de Jong Westman

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BIOL 214 (4)	Cell Biology	- <i>Becker's World of the Cell</i> , Hardin et al. -In-house lab manual: Capilano University Biology 214 Lab Manual	35 (1 section of 35 in Fall)	3 lect/ 3 lab	BIOL 111 (C-) and CHEM 200 as a prerequisite or co-requisite	Majors <i>Fall 2022–13 enrolled</i>	E. Chu
BIOL 215 (4)	Biochemistry	- <i>Biochemistry: A Short Course</i> , Tymoczko, et al. -In-house lab manual: Capilano University Biology 215 Lab Manual	Not offered	3 lect/ 3 lab	CHEM 201 as a prerequisite or co-requisite and BIOL 214	Majors <i>Not offered. CHEM 215 currently provides Biochemistry</i>	Not offered
BIOL 222 (4)	Microbiology	- <i>Brock Biology of Microorganisms</i> Madigan, et al. -Lab manual: <i>Microbiology Laboratory Theory & Applications</i> , Leboffe & Pierce	Not offered	3 lect/ 3 lab	BIOL 214 is a prerequisite and BIOL 215 is a prerequisite or co-requisite	Health Science Majors	Not offered
BIOL 230 (4)	Botany – Algae to Angiosperms	- <i>Evert, R.F. and S.E. Eichhorn, 2013. Raven Biology of Plants. 8th Edition. W.H. Freeman and Company Publishers, USA</i> - <i>Lab manual: Kazmierski, J.A. 2016. Exercises for the Botany Laboratory 2nd edition. Morton Publishing, USA</i>	35 (1 section of 35 in Spring)	3 lect/ 3 lab	BIOL 111 (C-) grade	Majors First offering	Paul McMillan (Lecture), Ann Meintz (Lab)

Course # (credits)	Course Name (Descriptor)	Text	Projected Enrolment 2023/24	Hours (/week)	Pre-requisites	Notes	Course Instructor for (2023/24)
BIOL 240 (3)	Pathology	<i>-Porth's Pathophysiology: Concepts of Altered Health States.</i> Hannon et al.	Not offered	3 lect	BIOL 113 (C-) or HKIN 191 (C-) or BIOL 111 (A-)	Health Science Majors <i>Spring 2020-15 enrolled</i> *Not planned to be offered in the future. Replaced by BIOL 241 and BIOL 242.	Not offered
BIOL 241 (3)	Pathology I	<i>-Porth's Pathophysiology: Concepts of Altered Health States.</i> Hannon et al.	35 (1 section of 35 in Fall)	3 lect	BIOL 113 (C-) or HKIN 191 (C-) or BIOL 111 (A-)	Health Science Majors <i>Fall 2021-12 enrolled</i>	M. Kiraly
BIOL 242 (3)	Pathology II	<i>-Porth's Pathophysiology: Concepts of Altered Health States.</i> Hannon et al.	35 (1 section of 35 in Spring)	3 lect	BIOL 113 (C-) or HKIN 191 (C-) or BIOL 111 (A-)	Health Science Majors <i>Not run in 2022/23</i>	M. Kiraly
BIOL 300 (4)	Molecular Genetics	<i>Molecular Biology: Principles and Practices, Cox et al.</i>	35 (1 section of 35 in Spring)	3 lect/ 3 lab	BIOL 200 (C-)	Majors Biomedical Science Concentration course of the BSc General <i>Spring 2023 – 8 enrolled</i>	E. Chu
BIOL 305 (3)	Ecological Principles for Sustainability	TBD	Not offered	3 lect	Successful completion of 45 credits at 100 level or higher	Non-Majors & Majors Serves as upper level science elective for non-science degree majors <i>Fall 2015-31 enrolled</i>	Not offered
BIOL 308 (3)	Conservation Biology	<i>Introduction to Conservation Biology.</i> Primack and Sher	Not offered in 2023/24	3 lect	BIOL 208 (C-)	Majors Environmental Science Concentration course of the BSc General <i>Spring 2023 – 8 enrolled</i>	T. Flower
BIOL 312 (3)	Human Physiology I: Brains, Hormones and Guts	<i>Students will be provided with selected peer reviewed literature for readings</i>	35 (1 section of 35 in Fall)	3 lect	BIOL 209 (C-)	Majors Biomedical Science Concentration course of the BSc General <i>Fall 2022 – 9 enrolled</i>	E. Chin

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BIOL 313 (3)	Human Physiology II	<i>Students will be provided with selected peer reviewed literature for readings</i>	35 (1 section of 35 in Summer)	3 lect	BIOL 209 (C-)	Majors Biomedical Science Concentration course of the BSc General <i>Summer 2023 – 7 enrolled</i>	E. Chin
BIOL 314 (3)	Advanced Cell Biology	- <i>Molecular Cell Biology</i> . Lodish et al.	Not offered in 2023/24	3 lect	BIOL 214 (C-); and BIOL 215 (C-) or CHEM 215 (C-)	Majors Biomedical Science Concentration course of the BSc General <i>(not yet offered)</i>	Not offered
BIOL 350 (3)	Natural History of BC	- <i>B.C. A Natural History</i> , Cannings & Cannings	Not offered	3 lect	Successful completion of 45 credits at 100 level or higher	Non-Majors & Majors Serves as upper level science elective for non-science degree majors <i>(not yet offered)</i>	Not offered
BIOL 351 (3)	Global Biogeography	- <i>Biogeography: An Ecological and Evolutionary Approach</i> , Cox et al.	35 (1 section of 35 in Fall)	3 lect	Successful completion of 45 credits at 100 level or higher	Non-Majors & Majors Serves as upper level science elective for non-science degree majors <i>Spring 2022-10 enrolled</i>	M. de Jong Westman
BIOL 352 (3)	Evolution of Life	- <i>Charles Darwin's Origin of Species: A Graphic Adaptation</i> , Keller & Fuller - <i>The Tangled Bank: An Introduction to Evolution</i> , Zimmer	Not offered	3 lect	Successful completion of 45 credits at 100 level or higher	Non-Majors & Majors Serves as upper level science elective for non-science degree majors <i>Fall 2014-39 enrolled</i>	Not offered
BIOL 353 (3)	Brain Health	- <i>Human Anatomy & Physiology</i> , Marieb & Hoehn - <i>Your Brain Health</i> , Kiraly	Not offered	3 lect	Successful completion of 45 credits at 100 level or higher	Health Science Non-majors Serves as upper level elective in the health sciences *Not planned to be offered in the future. Replaced by proposed BIOL 412.	Not offered

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BIOL 354 (3)	Physiology of Disease	<i>Exercise Physiology: - Energy, Nutrition and Performance, McArdle, et al</i>	Not offered	3 lect	Successful completion of 45 credits at 100 level or higher	Health Science Majors Serves as upper level elective in the health sciences (<i>not yet offered</i>)	Not offered
BIOL 401	Applied Population Ecology	<i>Readings will be selected from the primary literature, and will vary from year to year</i>	Not offered in 2023/24	3 lect / 3 lab	BIOL 208 (C-)	Majors Proposed Environmental Science concentration course of the BSc General	Not offered
BIOL 402	Applied Ecosystem Ecology	<i>Readings will be selected from the primary literature, and will vary from year to year</i>	Not offered in 2023/24	3 lect / 3 lab	BIOL 208 (C-)	Majors Proposed Environmental Science concentration course of the BSc General	Not offered
BIOL 403 (3)	Microbiology and Immunology	<i>- Microbiology: an evolving science. Slonczewski and Foster.</i>	Not offered in 2023/24	3 lect	BIOL 203 (C-) or BIOL 214 (C-); and BIOL 215 (C-) or CHEM 215 (C-)	Majors Biomedical Science Concentration course of the BSc General (<i>not yet offered</i>)	Not offered
BIOL 408 (4)	Ecosystem Restoration	<i>- Foundations of Restoration Ecology. Palmer, Zedler and Falk</i>	35 (1 section of 35 in Summer)	3 lect / 3 lab	BIOL 208 (C-)	Majors Environmental Science Concentration course of the BSc General (<i>not yet offered</i>)	P.McMillan
BIOL 409 (3)	Global Change Biology	<i>Bree Rosenblum, E. 2021. Global Change Biology. E-Book. Oxford University Press</i>	Not offered in 2023/24	3 lect	BIOL 208 (C-) or GEOG 222 (C-)	Majors Proposed Environmental Science concentration course of the BSc General	Not offered
BIOL 412 (3)	Special Topics in Pathophysiology : Neurological Disorders	<i>Readings will be selected from the primary literature, and will vary from year to year</i>	35 (1 section of 35 in Spring)	3 lect	BIOL 215 or CHEM 215, and BIOL 312	Majors Proposed Biomedical concentration course of the BSc General	M. Kiraly

PROGRAM CHANGES (or other Notes)

Changes to staff and faculty:

- Melissa Bodner hired as a Lab supervisor. Elaine Simons Lane has retired and Cathy Nguyen (internal) hired as a Tech 2

Program Updates:

- **BSc General**
 - Students will take one of three concentrations: Biomedical Sciences, Environmental Science or Computational Science.
 - Program launched in Spring 2022. 1st cohort intake in Spring 2023
 - Upper-level courses offered to support students joining mid-degree: BIOL 300, BIOL 308, BIOL 312, BIOL 313.
 - Additional Upper-level courses for 2023/24: BIOL 412, BIOL 408
- **Bachelor of Environment and Society**
 - Site visit planned, June 2023. Projected program launch date of Spring 2024

Changes to course offerings:

- BIOL 300, BIOL 308, BIOL 312, BIOL 313 ran for the first time in the 2022/23 academic year
- BIOL 408 and BIOL 412 will run in 2022/23
- BIOL 230 – Algae to Angiosperms course introduced to provide botany options to support upper-level courses building our BSc Integrated Sciences
- BIOL 109 or BIOL 110 included as pre- or corequisites for BIOL 111.

Course delivery format:

- All lectures and labs were delivered in-person.

Capilano University

Biology Articulation Report 2022

FACULTY and STAFF

Name and credentials	Role/courses instructed	Phone	Email
Neilab Amiri <i>B.Sc (SFU), M.Sc. (SFU)</i>	Laboratory Supervisor	604-986-1911 (x3449)	neilabamiri@capilano.ca
Eunice Chin <i>B.Sc. (Hons.) (SFU), M.Sc. (UBC), Ph.D. (Trent)</i>	Instructor	604-986-1911 (x3476)	eunicechin@capilano.ca
Eugene Chu <i>B.Sc. (Hons.) (SFU), Ph.D. (UBC)</i>	Instructor (Dept Coordinator)	604-986-1911 (x3492)	eugenechu@capilano.ca
Sabrina Cornish <i>B.Sc. (TRU), M.Sc. (University of Calgary)</i>	Instructor and Lab Supervisor	604-986-1911 (x3697)	sabrinacornish@capilano.ca
Marja de Jong Westman <i>B.Sc. (Hons.), M.Sc. (UBC)</i>	Instructor	604-986-1911 (x3478)	mdejong@capilano.ca
Bradley Fessenden <i>B.Sc. (Cal Poly Pomona), M.Sc. (CSUF)</i>	Laboratory Supervisor & Instructor	604-986-1911 (x3026)	bradleyfessenden@capilano.ca
Thomas, Flower <i>B.Sc. (Hons.)(University of Bristol), M.Sc. (University of Pretoria), Ph.D. (Cambridge)</i>	Instructor (Dept Coordinator starting in Fall 2022)	604-986-1911 (x3495)	thomasflower@capilano.ca
Michelle Gunness <i>B.Sc. (Hons.) (UWO), M.Sc. (Carleton)</i>	Laboratory Supervisor	604-986-1911 (x2552)	mgunness@capilano.ca
Michael Kiraly <i>B.Sc. (Hons.), M.Sc., PhD (Toronto)</i>	Instructor	604-986-1911 (x2430)	mkiraly@capilano.ca
Paul McMillan <i>B.Sc., M.Sc., PhD (Rutgers)</i>	Instructor	604-986-1911 (x2445)	pmcmilla@capilano.ca
Ann Meitz <i>B.Sc., M.Sc. (UVic)</i>	Laboratory Supervisor (Lab Convenor)	604-986-1911 (x7565)	ameitz@capilano.ca
Edward Pokrishevsky <i>B.Sc. (Hons.) (UBC), M.Sc. (UBC), Ph.D. (UBC)</i>	Instructor	604-986-1911 (x3662)	edwardpokrishevsky@capilano.ca
Cathy Nguyen <i>B.Sc. (SFU)</i>	Laboratory Technician	604-986-1911 (x3497)	cathynghuyen2@capilano.ca
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Name and credentials	Role/courses instructed	Phone	Email
Nazar O Kovalevskyy <i>B.Sc. (SFU)</i>	Laboratory Technician	604-986-1911 (x3497)	nazarkovalevskyy@capilano.ca
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Melissa Bodner	Laboratory Supervisor		

Articulation Representative & Biology Coordinator Fall 2022 - Summer 2025

Thomas Flower

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