

Physiology Prerequisites for Schulich Dentistry

2021-2022 Application Cycle

Dentistry requires all incoming students to have a thorough knowledge of human or mammalian systems physiology, which should include all of the following:

- neurophysiology (autonomic, sensory, motor and integrative)
- muscle
- cardiovascular
- respiratory
- gastrointestinal
- renal
- endocrine
- metabolism
- reproduction
- homeostasis

To satisfy the physiology prerequisite requirement, all applicants must successfully complete an approved full-year course or course equivalent (6 credit hours) by April 30th of the application cycle in which they apply, or write the challenge exam, and earn a pass or credit designation. In some cases more than a full year of approved courses may be required to cover all the physiology content our Doctor of Dental Surgery program requires. If more than one course is listed, then a pass or credit designation must be attained in **each course** listed in the combination.

The following options are available for obtaining the physiology prerequisite:

1) **Successful completion of a course, or course combination, listed in the table below.**

Since individual universities may alter their course offerings or the content of a course, this list is subject to change without notice. If your home university does not offer a listed course, please review the list as there are other universities that have approved distance education courses.

The absence of a course from this list does not necessarily imply that it is deficient or inadequate. If your university offers a physiology course or course combination covering the above mentioned subject areas in detail, please email the Admissions Office to request a review by Western University. You must indicate in your email an explanation of what course or course combinations you wish to have considered and must attach a **detailed course syllabus that includes course content, textbook and grading information for each course mentioned**. In cases where the request to review includes a course that is not on the approved list to be considered with a course at that institution that is on the approved list you must still submit the syllabus of the already approved course.

Please note:

- There may be courses listed that are not offered but they remain on the list as they are approved courses as long as they are not more than 10 years old. If there is a discontinued course that still appears on this list that is more than 10 years old, please email the Admissions Office with the relevant information so we can update the list.
- Course reviews for future applicants take place between April and August. Only applicants who have applied in the current application cycle have course reviews completed between September and March.

2) **Physiology Challenge Exam**

The Physiology Challenge Exam is offered to candidates who are invited for an interview, who will not have been able to fulfill the physiology course requirement by the end of the application cycle (April 30). Applicants have the opportunity to indicate their willingness to write the challenge exam as part of their application to Schulich Dentistry.

The Physiology Challenge Exam will be held during the interview weekend in February or online if in-person interviews are not possible. It is available only to candidates who are competitive in the applicant pool and have been invited for an interview. The exam is similar to the instrument used to evaluate students who take Physiology 2130 at Western. It is a multiple-choice exam in. A pass (minimum 50%) is required for your physiology background to be judged acceptable. A physiology course taken after the challenge exam will not be considered. There is a fee to cover the costs of administering this exam.

To be successful in the challenge exam, students should be familiar with human systems physiology at the level presented in a recent edition of **one** of the following textbooks:

Human Physiology: The Mechanisms of Body Function, by Vander, Sherman and Luciano (McGraw Hill).

Human Physiology: An Integrated Approach, by Silverthorn (Prentice Hall).

ACCEPTABLE PHYSIOLOGY PREREQUISITES FOR THE SCHULICH DENTAL PROGRAM

INSTITUTION	APPROVED COURSES/COURSE COMBINATIONS (+) means must complete all courses listed to cover content required by our program
<p>This list is reviewed and updated as new information becomes available. Courses listed as acceptable during this application cycle may not be acceptable in future application cycles. If you have any concerns about acceptability of courses please see instructions above regarding review of prerequisite courses.</p>	
Acadia University	BIOL 2813 + BIOL 2823 BIOL 3173 + BIOL 3183 KINE 2413 + 2423
University of Alberta	Physiology 161 Physiology 210 Physiology 211 Physiology 252 Physiology 212 + Physiology 214 ZOOL 241 + ZOOL 242
Ambrose University	ZOO 261 + ZOO 263
Athabasca University	BIOL 230
Bishop's University	Biology 226A + Biology 228B
University of British Columbia	Physiology 301 CAPS 301 BIOL 353 KIN 190 + KIN 191 BIOL 153 BIOL 155
Brock University	BIOL 2P97 + PEKN 2P09 BIOL 2P97 + KINE 2P09 BIOL 2P97 + CHSC 2P09 BIOL 2P97 + HLSC 2P09

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University of Calgary	ZOOL 361 + ZOOL 363 ZOOL 461 + ZOOL 463 MDSC 404 MDSC 502 MDSC 604 KNES 259 + KNES 260
Carleton University	BIOL 3305 + BIOL 3307 BIOL 2005 + BIOL 3306 + NEUR 2201 + FOOD 2001
Concordia University	BIOL 383 + BIOL 483 EXCI 257 + EXCI 357
Dalhousie University	PHYL 2030X/Y PHYL 2031+ PHYL 2032 PHYL 2041 + PHYL 2044 PHYL 1010X/Y PHYL 1000X/Y (distance education) PHYL 1400X/Y PHYL 1011 + PHYL 1012 PHYL 1001 + PHYL 1002
University of the Fraser Valley	KPE 270 + KPE 370
University of Guelph	HK 3940 BIOM 3100 + BIOM 3110 BIOM 3200 HK 2810 + HK 3810
University of Guelph Humber	KIN 1060 + KIN 2060
Grant McEwan University	ZOOL 241 + ZOOL 242 PEDS 101 + PEDS 103

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Lakehead University	BIOL 2035 + BIOL 3250
Laurentian University	BIOL 2105 + BIOL 3756 BIOL 2105 + BIOL 2701
University of Manitoba	ZOO 2530 + ZOO 2540 BIOL 2410 + BIOL 2420
McGill University	PHGY 201 + PHGY 202 PHGY 209 + PHGY 210 NSCI 200 + PHGY 210
McMaster University	BIOL 3U03 + BIOL 3UU3 HTH SCI 1B07 + HTH SCI 2B08 HTH SCI 2F03 + HTH SCI 2FF3 HTH SCI 2L03 + HTH SCI 2LL3 BIOL 2AO3 + BIOL 3UU3 BIOL 2AO3 + BIOL 3UO3 KINESIOL 1Y03 + KINESIOL 1YY3 KINESIOL 1A03 + KINESIOL 1AA3 KINESIOL 2Y03 + KINESIOL 2YY3 BIOL 2AO3 + HTH SCI 3I03
Memorial University	BIOCH 311A/B Medicine 310 A/B
Université de Moncton	BIO 2133 + BIO 2233
Mount Allison University	BIO 2004 + BIO 3005 BIOL 3201 + BIOL 3211
Mount Royal College/University	ZOO 3361 + ZOO 3363 BIOL 3104 + BIOL 3205

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University of New Brunswick	BIOL 2721 + BIOL 2782 (1782=2782) BIOL 2761 + BIOL 2792
Niagara University	BIOL 231 + BIOL 232
University of Northern British Columbia	HHSC 111 + HHSC 112
University of Ottawa	PHS 3240 PHS 3341 + PHS 3342 PHS 3341 + ANP 1105 + ANP 1107 ANP 1105 + ANP 1106 + ANP 1107 ANP 1505 + ANP 1506 + ANP 1507 ANP 1105 + ANP 1106 + PHS 3342 ANP 1105 + APA 2301 + ANP 1107
University of Prince Edward Island	BIOL 401 + BIOL 402 BIOL 1230 + BIOL 3260
Queen's University	PHGY 210 PHGY 212 PHGY 214 PHGY 215 + PHGY 216
University of Regina	KIN 267 + KIN 268
Ryerson University	PLN 103 + PLN 203 BLG 600 + BMS 605
St. Francis Xavier University	BIOL 251 + BIOL 252
St. Mary's University	BIOL 2322 + BIOL 2323 BIOL 2004 + BIOL 2005 BIOL 2004 + 3005

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University of Saskatchewan	PHSI 208 PHSI 212
Simon Fraser University	KIN 305 + KIN 306 BPK 305 + BPK 306
Thompson Rivers University	BIOL 354 + BIOL 355 BIOL 1593 + BIOL 1693
University of Toronto	PSL 200Y PSL 201Y PSL 302Y PSL 300H + PSL 301H
University of Toronto – Mississauga	BIOL 210 + BIOL 304 + BIOL 310
University of Toronto – Scarborough	BGYB 30 + BGYC 33 BGYB 30 + BGYC 34 BIOB 30 + BIOC 33 BIOB 30 + BIOC 34 BIOC 32 + BIOC 33 BIOB 34 + BIOC 33 BIOB 34 + BIOC 34 BIOC 32 + BIOC 34
University of Toronto – School of Continuing Studies	SCS 2159 – distance studies/online
Trent University	BIOL 3830 + BIOL 3840
Trinity Western	BIOL 241 + BIOL 242
University of Victoria	PE 241A + PE 241B PE 241A + EPHE 241B

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University of Waterloo	BIOL 273 + BIOL 373 (distance education also) SCI 351 + SCI 352 (distance education also) BIOL 273 + SCI 352 PHARM 110 + PHARM 111
Western University https://westerncalendar.uwo.ca/Courses.cfm?SelectedCalendar=Live&ArchiveID	PHYSIO 1020 PHYSIO 1021 PHYSIO 2130 PHYSIO 3120
Wilfrid Laurier University	BI 216 + BI 217 BI 216 + BI 396i HE 211 + BI 217 HE 211 + BI 396i KP 220 + KP 322 + KP 425 HN 220 + HN 320
University of Windsor	BIOL 55-204 + BIOL 55-205 Mammalian PHYSIO 55-484 + 55-485
University of Winnipeg	BIOL 1112/6
York University	AS/SC/KINE 2011 (3011) + AS/SC/KINE 3012 SC/BIOL 3060 + SC/BIOL 3070