## **Biology: Medical Biology concentration**

This page is subject to change as courses are added, cancelled, or adjusted.

Courses with the statement 'Will Require a PERMIT' next to them will require you to <u>submit a permit</u> in order to register for the course.

Please keep in mind, other courses may still require a permit if there is an error in the system out of our control.

## **Spring 2025 Classes**

### **Medical Biology Concentration Core:**

Biology Majors with a Medical Biology concentration MUST complete at least two lecture and lab combinations from the list below to meet graduation requirements. However, if you choose to take additional courses they will count as major electives:

| Code      | Title                             | Pre-Reqs   | Campus  | Notes  |
|-----------|-----------------------------------|--|---|--|
| BSC 2093C | Human Anatomy and<br>Physiology 1 | BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2045 | St. Pete                                      |  |
| MCB 3020  | General Microbiology              | BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2046 | Tampa,<br>St. Pete, &<br>Sarasota-<br>Manatee | May require a PERMIT if registering without the lab or if you haven't completed CHM 2210 |
| MCB 3020L | General Microbiology Lab          | Pre-Req/Co-Req: MCB 3020                           | Tampa,<br>St. Pete, &<br>Sarasota-<br>Manatee |  |
| PCB 3023  | Cell Biology                      | BSC 2010, BSC 2010L, CHM 2046                      | Tampa   |  |
| PCB 3023L | Cell Biology Lab                  | Pre-Req/Co-Req: PCB 3023                           | Tampa   |  |
| PCB 3712  | General Physiology                | BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2046 | Tampa & St. Pete                              |  |
| PCB 3713L | General Physiology Lab            | Pre-Req/Co-Req: PCB 3712                           | Tampa & St. Pete                              |  |

# **Medical Biology Restricted Electives:**

Biology Majors with a Medical Biology concentration MUST complete a minimum of 6 credit hours from the below list to meet graduation requirements.

| Code      | Title                             | Pre-Reqs                             | Campus  | Notes   |
|-----------|-----------------------------------|--------------------------------------|---|---|
| BCH 3023L | Basic Biochemistry Lab            | Pre-Req/Co-Req: BCH 3053 or BCH 3023 | Tampa   |   |
| BCH 3053  | General Biochemistry              | BSC 2010, BSC 2010L, CHM 2210        | Tampa,<br>St. Pete, &<br>Sarasota-<br>Manatee | **Only 1 Biochemistry course can count as an elective |
| BOT 3850  | Medical Botany                    | BSC 2010, BSC 2011, CHM 2210         | Tampa   |   |
| BSC 2094C | Human Anatomy and<br>Physiology 2 | BSC 2093C                            | Tampa,<br>St. Pete, &<br>Sarasota-<br>Manatee |   |

| Code      | Title   | Pre-Reqs   | Campus                          | Notes  |
|-----------|---|--|---------------------------------|--|
| BSC 4444  | Genomics  | PCB 3063   | St. Pete                        |  |
| BSC 4933  | Mechanisms of Aging                                 | PCB 3023, PCB 3063   | Tampa                           | Will Require a PERMIT  |
| BSC 4933  | Medical Bacteriology                                | MCB 3020, MCB 3020L  | Tampa                           | Will Require a PERMIT  If you have taken MCB 4115 previously, this course cannot be used toward your major.  Restricted to Senior MIC majors until Dec. 3 <sup>rd</sup>  |
| BSC 4933  | Medical Bacteriology Lab                            | Pre-Req/Co-Req: BSC 4933: Medical<br>Bacteriology Lecture                    | Tampa                           | Will Require a PERMIT  If you have taken MCB 4115L previously, this course cannot be used toward your major.  Restricted to Senior MIC majors until Dec. 3 <sup>rd</sup> |
| MCB 4276  | Disease Biology                                     | PCB 3063, PCB 3043   | Tampa                           |  |
| MCB 4810  | Medical Mycology                                    | MCB 3020, MCB 3020L  | Tampa                           | If you have taken the BSC 4933 version previously, this course cannot be used toward your major.   |
| PCB 4109  | Cancer Biology                                      | PCB 3023, PCB 3063, MCB 3410   | Tampa                           | Restricted to Senior<br>CAM/CBO majors until<br>Dec. 3 <sup>rd</sup>   |
| PCB 4234  | Principles of Immunology                            | PCB 3023  (a B or better in MCB 3020 & PCB 3023 are recommended for success) | Tampa & St. Pete                | -  |
| PCB 4663  | Human Genetics                                      | PCB 3023, PCB 3063   | Tampa                           | Will Require a PERMIT if PCB 3023 is not completed   |
| PCB 4707  | Survival Physiology                                 | PCB 3712 or BSC 2093C  | Sarasota-<br>Manatee            | 1.2  |
| PCB 4744  | Biomedical Physiology                               | PCB 3023   | Tampa &<br>Sarasota-<br>Manatee |  |
| PHZ 4702  | Application of Physics to<br>Biology and Medicine 1 | PHY 2054 or PHY 2049, PHY 2054L or PHY 2049L                                 | Tampa                           |  |
| ZOO 3713C | Comparative Vertebrate<br>Anatomy                   | BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2046                           | Tampa                           | Restricted to Senior<br>Animal Concentration<br>students until Dec. 3 <sup>rd</sup>  |

**Additional Biology Electives:**Biology Majors with a Medical Biology concentration MUST also complete 3 credit hours of upper-level biology elective coursework to meet graduation requirements.

| Code      | Title                                      | Pre-Reqs   | Campus                   | Notes   |
|-----------|--|--|--------------------------|---|
| BOT 3015C | General Botany                             | BSC 2010 or BSC 2011   | St. Pete                 |   |
| BOT 3152C | Field Botany                               | BSC 2011, BSC 2011L  | Tampa                    | Restricted to Senior<br>Ecology/Evolution<br>Concentration students<br>until Dec. 3 <sup>rd</sup> |
| BSC 3312  | Marine Biology                             | BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2046   | Tampa & St. Pete         |   |
| BSC 4052  | Conservation Biology                       | PCB 3043   | Tampa & St. Pete         | May require a PERMIT if you haven't completed MAC 2311/2241                                       |
| BSC 4284  | Symbiosis & The<br>Environment             | PCB 3043   | Tampa                    |   |
| BSC 4315  | Deep Sea Biology                           | C or better in BSC 2011 & BSC 2011L  | St. Pete                 |   |
| BSC 4452  | Computational Biology                      | (BSC 3312 is recommended for success)  CHM 2046, MAC 2312 or MAC 2242, STA 2023, PHY 2049 or PHY 2054  | Tampa                    |   |
| DCC 4454C | D: :/1D:                                   | (knowledge of computer programming is recommended for success)   | T                        |   |
| BSC 4454C | Digital Dinosaurs                          | BSC 2011, BSC 2011L  | Tampa                    |   |
| BSC 4851  | Hollywood Biology                          | BSC 2010, BSC 2011, Junior/Senior Standing   | Tampa & Sarasota-Manatee |   |
| BSC 4910  | Undergraduate Research                     | Consent of Instructor  If interested in this type of credit, review our Undergraduate Research website | Tampa                    | Will require Consent of<br>Instructor PERMIT  |
| BSC 4933  | Community Ecology                          | PCB 3043 or Consent of Instructor  | St. Pete                 | Will Require a PERMIT   |
| BSC 4933  | Fisheries Ecology &<br>Sustainability      | PCB 3043   | Tampa                    | Will Require a PERMIT   |
| BSC 4933  | Forest Ecology                             | PCB 3043   | Tampa                    | Will Require a PERMIT   |
| BSC 4933  | Global Change Biology                      | BSC 2011   | Tampa                    | Will Require a PERMIT   |
| BSC 4933  | Learning Assistant-<br>Cancer Biology      | PCB 4109   | Tampa                    | Will require Consent of<br>Instructor PERMIT  |
| BSC 4933  | Learning Assistant-<br>Genetics            | PCB 3063L  | Tampa                    | Will require Consent of<br>Instructor PERMIT  |
| BSC 4933  | Learning Assistant-<br>Mechanisms of Aging | BSC 4933: Mechanisms of Aging & Consent of Instructor  | Tampa                    | Will require Consent of<br>Instructor PERMIT  |

| Code     | Title                                    | Pre-Reqs   | Campus           | Notes  |
|----------|--|--|------------------|--|
| BSC 4933 | Learning Assistant-<br>Molecular Biology | PCB 3023L/PCB 3063L Super-Lab  | Tampa            | Will require Consent of<br>Instructor PERMIT   |
| BSC 4933 | Lectures in Contemporary<br>Biology      | Senior IB Major  | Tampa            | Will Require a PERMIT  |
| BSC 4933 | Marine Climate Change                    | BSC 3312 or PCB 3043   | Tampa            | Will Require a PERMIT  |
| BSC 4933 | Sociobiology                             | PCB 3063, PCB 3063L  (MCB 3020, MCB 3020L, & PCB 3023 are recommended for success) | St. Pete         | Will Require a PERMIT  |
| BSC 4933 | Sustainability of Natural<br>Resources   | BSC 2011   | Tampa            | Will Require a PERMIT  |
| BSC 4937 | Seminar- Marine Biology                  | BSC 3312   | Tampa            | Restricted to Senior<br>MRB/MRN majors until<br>Dec. 3 <sup>rd</sup>                             |
| BSC 4940 | Biology Internship                       | Please visit the <u>Biology Internship Webpage</u> for pre-reqs and instructions.  | Tampa & St. Pete | Requires approval of<br>Application  |
| MCB 3410 | Cell Metabolism                          | BSC 2010, BSC 2010L, CHM 2046  | Tampa            |  |
| MCB 4201 | Bacterial Stress Responses               | MCB 3020, MCB 3020L  | Tampa            | If you have taken the BSC 4933 version previously, this course cannot be used toward your major. |
| MCB 4320 | Molecular Microbiology                   | MCB 3020, MCB 3020L, PCB 3023, PCB 3063  | Tampa            | May Require a PERMIT   |
| PCB 4024 | Molecular Biology of the<br>Cell         | PCB 3023, PCB 3063, MCB 3410   | Tampa            | Restricted to Senior<br>CAM/CBO majors until<br>Dec. 3 <sup>rd</sup>                             |
| PCB 4026 | Molecular Biology of the<br>Gene         | PCB 3023, PCB 3063, MCB 3410   | Tampa            | Restricted to Senior<br>CAM/CBO majors until<br>Dec. 3 <sup>rd</sup>                             |
| PCB 4315 | Marine Ecology                           | BSC 3312   | St. Pete         |  |
| ZOO 4233 | Parasitology                             | BSC 2011, BSC 2011L, CHM 2210  | Tampa & St. Pete |  |
| ZOO 4513 | Animal Behavior                          | BSC 2010, BSC 2010L, BSC 2011, BSC 2011L, CHM 2046                                 | Tampa            | May require a PERMIT<br>if you haven't completed<br>or are registered for<br>CHM 2211            |
| ZOO 4694 | Developmental Biology                    | PCB 3023, PCB 3063   | Tampa            |  |
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