# GRADUATE SCHOOL OF BIOMEDICAL SCIENCES FALL 2023 COURSE OFFERINGS

### **BIOCHEMISTRY AND MOLECULAR BIOLOGY**

| CRN#             | Catalog # | Credits | Title/Instructor   | Day            | Time           | Location                     |
|------------------|-----------|---------|--|----------------|----------------|------------------------------|
| 14851            | BCHM 1010 | 4       | <b>General Biochemistry I</b> Dr. Kristina H. Petersen   | Tues. & Thurs. | 4:00-5:50 pm   | Hybrid: In-Person and Online |
| 17206            | BCHM 1011 | 3       | Selected Topics in Biochemistry I<br>Dr. Kristina H. Petersen  | Tues. & Thurs. | 4:00-5:50 pm   | Hybrid: In-Person and Online |
| <del>17207</del> | BCHM 2330 | 2       | Vitamins and Minerals Dr. John Pinto   | Monday         | 4:00-5:50 pm   | Hybrid: In-Person and Online |
| 17208            | BCHM 7010 | 1       | <b>Directed Readings in Specialized Topics</b> <i>Topic and Instructor - To Be Arranged Dr. Victor Fried</i> |                | To Be Arranged |                              |
| 17209            | BCHM 8020 | 1       | <b>Departmental Seminar and Journal Club</b> <i>Dr. Victor Fried</i>   | TBD            |                |                              |

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|-------|-----------|---------|---|------------------|
| 17210 | BCHM 8311 | 1       | Teaching Assistance in Biochemistry and Molecular Biology | Dr. Victor Fried |
| 17211 | BCHM 8312 | 2       | Teaching Assistance in Biochemistry and Molecular Biology | Dr. Victor Fried |
| 17212 | BCHM 9110 | 1       | Research Rotation in Biochemistry & Molecular Biology*    | Dr. Victor Fried |
| 17213 | BCHM 9200 | 1       | Research Techniques in Biochemistry & Molecular Biology*  | Dr. Victor Fried |
| 17215 | BCHM 9800 | 1-5     | Master's Thesis Research                                  | Dr. Victor Fried |
| 17216 | BCHM 9900 | 1       | Doctoral Dissertation Research*                           | Dr. Victor Fried |

<sup>\*</sup>Open to PhD Students Only

# **CELL BIOLOGY**

| CRN#             | Catalog # | Credits | Title/Instructor  | Day   | Time                     | Location           |
|------------------|-----------|---------|---|---|--------------------------|--------------------|
| 14855            | CBAM 1320 | 3       | <b>Lectures in Histology</b> <i>Dr. Ken Lerea (Limit = 50)</i>  | Mon. & Wed.                                       | 4:30-5:50 pm             | In-Person: Chouake |
| 14856            | CBAM 1330 | 2       | Laboratory in Histology Dr. Ken Lerea (Enrollment Limit = 20; co-req CBAM 1320)   | Mon. & Wed.                                       | 6:00-7:50 pm             | In-Person: MEC 309 |
| 17217            | CBAM 1420 | 6       | Medical Histology-Cell Biology Dr. Ken Lerea & staff (PHD students only)  | Medical School course; follows different schedule |                          |                    |
| 17218            | CBAM 8020 | 1       | Research Seminar Dr. Victor Fried   | Wednesday   | 2:00-2:50 pm             | In-Person: BSB 210 |
| <del>17219</del> | CBAM 7101 | 4       | Novel Mechanisms in Protein Synthesis  Dr. Victor A. Fried CANCELLED  Enrollment Limit = 18 (second year MS or Ph.D. students only; Biochem I required) | <del>Friday</del>                                 | <del>11:00-1:00 pm</del> | In Person: BSB 210 |

| CRN#  | Catalog #        | Credits | Title/Instructor                                  |                     |
|-------|------------------|---------|---|---------------------|
| 17220 | CBAM 8311        | 1       | Teaching Assistance in Cell Biology and Anatomy   | Dr. Victor Fried    |
| 17221 | <b>CBAM 8312</b> | 2       | Teaching Assistance in Cell Biology and Anatomy   | Dr. Victor Fried    |
| 17222 | CBAM 8320        | 2       | Teaching Assistance Histology                     | Dr. Ken Lerea       |
| 17223 | <b>CBAM 9110</b> | 1       | Research Rotation in Cell Biology & Neuroscience* | Dr. Joseph Etlinger |
| 17224 | <b>CBAM 9200</b> | 1       | Research Techniques in Cell Biology*              | Dr. Victor Fried    |
| 17226 | <b>CBAM 9800</b> | 1-5     | Master's Thesis Research                          | Dr. Victor Fried    |
| 17227 | <b>CBAM 9900</b> | 1       | Doctoral Dissertation Research*                   | Dr. Victor Fried    |

<sup>\*</sup>Open to PhD Students Only

| <b>MICROBIOLOGY</b> | AND | <b>IMMUNOLOGY</b> |
|---------------------|-----|-------------------|
|                     |     |                   |

| CRN#             | Catalog # | Credits | Title/Instructor  | Day                 | Time           | Location                   |
|------------------|-----------|---------|---|---------------------|----------------|----------------------------|
| 17228            | MCRM 1010 | 4       | <b>General Microbiology I</b><br>Dr. S. Bakshi, Dr. R. Tiwari & staff                               | Mon. & Wed.         | 4:00-5:50 pm   | Hybrid: BSB 307 and Online |
| 17231            | MCRM 2010 | 2       | <b>Basic Immunology</b><br>Drs. Raj Tiwari, Jan Geliebter & Carl Hamby                              | Tuesday             | 4:00-5:50 pm   | Hybrid: BSB 307 and Online |
| 17238            | MCRM 7010 | 1-2     | <b>Directed Readings in Microbiology</b> <i>Topic and Instructor - To Be Arranged Dr. S. Bakshi</i> |                     | To Be Arranged |                            |
| <del>17239</del> | MCRM 7200 | 2       | Current Topics in Microbiology & Immunology: Systems Approaches to Dr. Dana Mordue CANCELLED        | <del>Thursday</del> | 4:00-5:50 pm   | Hybrid: BSB 307 and Online |
| 17240            | MCRM 8020 | 1       | <b>Departmental Seminar</b><br>Dr. Raj Tiwari   | Friday              | 12:00-12:50 pm | Hybrid: BSB 307 and Online |
| <del>17241</del> | MCRM 7101 | 1       | Selected Topics in Microbiology & Immunology: Systems Approaches to Infectious Diseases             | <del>Thursday</del> | 4:00-5:50 pm   | Hybrid: BSB 307 and Online |

| CRN#  | Catalog # | Credits | Title/Instructor  |                |
|-------|-----------|---------|---|----------------|
| 17242 | MCRM 8311 | 1       | Teaching Assistance in Microbiology and Immunology      | Dr. Raj Tiwari |
| 17243 | MCRM 8312 | 2       | Teaching Assistance in Microbiology and Immunology      | Dr. Raj Tiwari |
| 17244 | MCRM 9110 | 1       | Research Rotation in in Microbiology and Immunology *   | Dr. Raj Tiwari |
| 17245 | MCRM 9200 | 1       | Research Techniques in in Microbiology and Immunology * | Dr. Raj Tiwari |
| 17247 | MCRM 9800 | 1-5     | Master's Thesis Research                                | Dr. Raj Tiwari |
| 17248 | MCRM 9900 | 1       | Doctoral Dissertation Research*                         | Dr. Raj Tiwari |

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# PATHOLOGY

| CRN#  | Catalog # | Credits | Title/Instructor   | Day               | Time                     | Location                |
|-------|-----------|---------|--|-------------------|--------------------------|-------------------------|
| 17262 | PATM 1050 | 2       | Conceptual Pathology Dr. Tetyana Cheairs (PhD students & MS students (with instructor)                 | r's permission or | TBD<br>nly); co-req PATM | In-Person: BSB 414      |
| 17263 | PATM 1080 | 3       | Introduction to Pathology Dr. Tetyana Cheairs  | Thursday          | 4:30-7:20                | Hybrid: BSB 414         |
| 17264 | PATM 1110 | 3       | Fundamentals of Animal Research  Dr. Sulli Popilskis  (\$515 Lab Fee; Enrollment Limit = 12)           | Mon. & Wed.       | 5:00-7:50 pm             | In-Person: BSB 711, 712 |
| 17265 | PATM 7010 | 1-2     | <b>Directed Readings in Pathology</b> <i>Topic and Instructor - To Be Arranged Dr. Tetyana Cheairs</i> |                   | To Be Arranged           |                         |
| 17266 | PATM 8010 | 1       | Journal Club*  Dr. Tetyana Cheairs   | Wednesday         | 1:00 - 1:50 pm           | Hybrid: Classroom TBD   |
| 17267 | PATM 7101 | 1       | <b>Selected Topics in Cancer Biology</b> <i>Dr. Dazhong Xu Enrollment Limit = 18</i>                   | Tuesday           | 6:00 -7:50 pm            | In Person: BSB 414      |

| CRN#  | Catalog #        | Credits | Title/Instructor                      |                     |
|-------|------------------|---------|---------------------------------------|---------------------|
| 17268 | PATM 8311        | 1       | Teaching Assistance in Pathology      | Dr. Tetyana Cheairs |
| 17269 | PATM 8312        | 2       | Teaching Assistance in Pathology      | Dr. Tetyana Cheairs |
| 17270 | <b>PATM 9110</b> | 1       | Research Rotation in in Pathology *   | Dr. Tetyana Cheairs |
| 17271 | PATM 9200        | 1       | Research Techniques in in Pathology * | Dr. Tetyana Cheairs |
| 17273 | PATM 9800        | 1-5     | Master's Thesis Research              | Dr. Tetyana Cheairs |
| 17274 | PATM 9900        | 1       | Doctoral Dissertation Research*       | Dr. Tetyana Cheairs |

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### PHARMACOLOGY

| CRN#  | Catalog # | Credits | Title/Instructor   | Day            | Time           | Location                        |
|-------|-----------|---------|--|----------------|----------------|---------------------------------|
| 17278 | PHRM 1010 | 4       | Pharmacology I<br>Dr. Charles T. Stier   | Tues. & Thurs. | 4:00-5:50 pm   | Hybrid: BSB 511 and Online      |
| 17276 | PHRM 2110 | 2       | <b>Selected Topics In Neuropharmacology</b> <i>Dr. C. Andrew Powers</i>                                    | Monday         | 4:00-5:50 pm   | Hybrid: BSB 511 and Online      |
| 17277 | PHRM 7010 | 1-2     | <b>Directed Readings in Pharmacology</b> <i>Topic and Instructor - To Be Arranged Dr. Charles T. Stier</i> |                | To Be Arranged |                                 |
| 17279 | PHRM 7101 | 1       | Selected Topics in Pharmacology Dr. Austin Guo Enrollment Limit = 12                                       | Thursday       | 2:00-3:50 pm   | In-Person: Room 511             |
| 17280 | PHRM 8010 | 1       | <b>Journal Club</b> <i>Dr. Sachin Gupte</i>  | Wednesday      | 3:00-3:50 pm   | Hybrid: BSB Room 511 and Online |

| CRN#  | Catalog # | Credits | Title/Instructor                         |                      |
|-------|-----------|---------|--|----------------------|
| 17281 | PHRM 8311 | 1       | Teaching Assistance in Pharmacology      | Dr. Sachin Gupte     |
| 17282 | PHRM 8312 | 2       | Teaching Assistance in Pharmacology      | Dr. Sachin Gupte     |
| 17283 | PHRM 9110 | 1       | Research Rotation in in Pharmacology *   | Dr. Sachin Gupte     |
| 17284 | PHRM 9200 | 1       | Research Techniques in in Pharmacology * | Dr. Sachin Gupte     |
| 17286 | PHRM 9800 | 1-5     | Master's Thesis Research                 | Dr. Charles T. Stier |
| 17287 | PHRM 9900 | 1       | Doctoral Dissertation Research*          | Dr. Sachin Gupte     |

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# PHYSIOLOGY

| CRN#  | Catalog # | Credits | Title/Instructor  | Day         | Time           | Location                             |
|-------|-----------|---------|---|-------------|----------------|--------------------------------------|
| 17288 | PHYM 1010 | 4       | <b>Mammalian Physiology I</b> Dr. Marcello Rota, Dr. Brian Ratliff                                | Mon. & Wed. | 4:00-5:50 pm   | Hybrid: Online and In-Person (Cooke) |
| 14873 | PHYM 1015 | 4       | Mammalian Physiology I - AMP<br>Open to AMP Students Only<br>Dr. Marcello Rota, Dr. Brian Ratliff | Mon. & Wed. | 4:00-5:50 pm   | Hybrid: Online and In-Person (Cooke) |
| 17290 | PHYM 7010 | 1-2     | Directed Readings in Physiology Topic and Instructor - To Be Arranged                             |             | To Be Arranged |                                      |
| 17291 | PHYM 8010 | 1       | Dr. Carl Thompson  Journal Club  Dr. Christopher Leonard  | Monday      | 12:00-12:50 pm | Hybrid: BSB 609 and Online           |
| 17292 | PHYM 8020 | 1       | Seminar/Research Rounds * Dr. Carl Thompson   |             | To Be Arranged |                                      |

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|-------|-----------|---------|------------------------------------|-------------------|
| 17293 | PHYM 8311 | 1       | Teaching Assistance in Physiology  | Dr. Carl Thompson |
| 17294 | PHYM 8312 | 2       | Teaching Assistance in Physiology  | Dr. Carl Thompson |
| 17295 | PHYM 9110 | 1       | Research Rotation in Physiology*   | Dr. Carl Thompson |
| 17296 | PHYM 9200 | 1       | Research Techniques in Physiology* | Dr. Carl Thompson |
| 17298 | PHYM 9800 | 1-5     | Master's Thesis Research           | Dr. Carl Thompson |
| 17299 | PHYM 9900 | 1       | Doctoral Dissertation Research*    | Dr. Carl Thompson |

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#### BASIC MEDICAL SCIENCES

| CRN#           | Catalog #              | Credits  | Title/Instructor  | Day                          | Time                 | Location                              |
|----------------|------------------------|----------|---|------------------------------|----------------------|---------------------------------------|
| 17301          | BMSM 3510              | 2        | Life in Biomedical Research I Dr. Jonathan Fisher (PhD students only) PERMISSION OF INSTRUCTOR REQUIRED FO                            | Tuesday<br>OR ALL OTHER ST   |                      | Hybrid: BSB 609 and Online            |
| 14853          | BMSM 8030              | 1        | Scientific Writing<br>Linked to BMSM 8041 and PERMISSION OF I<br>COURSE BEGINS IN JULY  | TBD<br><b>NSTRUCTOR RE</b> ( | TBD<br><b>QUIRED</b> | Hybrid: BSB 609 and Online            |
| 14854          | BMSM 8041              | 1        | Critical Analysis Dr. John Pinto & Ms. Amy Stermer PERMISSION OF INSTRUCTOR REQUIRED COURSE BEGINS IN JULY                            | TBD                          | TBD                  | Hybrid: BSB 609 and Online            |
| 17302          | BMSM 8050              | 1        | Graduate Research Workshop Dr. Victor Fried & Dr. Ken Lerea PERMISSION OF INSTRUCTOR REQUIRED Open to MS Track B Thesis Students Only | TBD                          | TBD                  | Hybrid: BSB 210 and Online            |
| 17303          | BMSM 8400              | 3        | Internship in the Biomedical Sector (PSM students only) Dr. Dana Mordue PERMISSION OF INSTRUCTOR REQUIRED RESEARCH                    | AND THESIS COU               | To Be Arranged       |                                       |
| CRN#           | Catalog #              | Credits  | Title/Instructor  |                              |                      |                                       |
| 17304<br>17306 | BMSM 9110<br>BMSM 9800 | 1<br>1-5 | Research Rotation (1st year IPP students)* Master's Thesis Research   |                              |                      | Dr. Tetyana Cheairs<br>Dr. Austin Guo |
| 17307          | BMSM 9920              | 1        | Research for Exchange Students  |                              |                      | Dr. Marina K. Holz                    |

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#### MAINTENANCE OF MATRICULATION

| CRN#  | Catalog # | Credits | Title/Instructor                         | Day | Time | Room |  |
|-------|-----------|---------|--|-----|------|------|--|
| 17300 | BMSM 1000 | 0       | \$100 plus appropriate registration fees |     |      |      |  |