

# SPRING 2014 MASTERS, CERTIFICATE & NON-MATRICULATED COURSE SCHEDULE

## Graduate School of Biomedical Sciences

Consult (<http://njms.rutgers.edu/gsbs/index.cfm>) or respective Course Director(s) for up to date information.

Please note that it is the responsibility of the student to contact the respective course director(s) for the correct time, dates and room assignment information. Instructor e-mail addresses and phone numbers are provided for your convenience.

**COURSES HIGHLIGHTED IN YELLOW ARE NOT AVAILABLE FOR ONLINE REGISTRATION**

During the online registration period, students may obtain email permission from the course director and forward the email to the Registrar at [leeba@gsbs.rutgers.edu](mailto:leeba@gsbs.rutgers.edu) to be manually registered in any course highlighted in yellow. Add/Drop forms and signatures are required after online registration has ended.

Course #	Title	Course Director	Prerequisites	Credits	Grade Mode	Day(s)	Start Date	End Date	Start Time	End Time	Location
BIOC 5007Q	Foundations of Biochemistry and Molecular Biology	Virendra N Pandey vnp22@njms.rutgers.edu 973-972-0660	Open to Masters & PhD students.	1	N	Monday	1/6	4/28	5:00 PM	6:00 PM	MSB E-609
BIOC 5125Q	Viruses, Cells and Disease	Sergei Kotenko kotenkse@njms.rutgers.edu 973-972-3134	Open to Masters & PhD students. Approval by Course Directors for Masters students.	2	N	Tuesday & Thursday	1/7	2/25	5:00 PM	7:00 PM	MSB E-609
CBMM 5020Q	Developmental Biology & Stem Cells	Diego Fraidenraich fraidedi@njms.rutgers.edu 973-972-5525	Open to Masters & PhD students.	2	N	Tuesday & Friday	2/25	4/11	10:00 AM	12:00 PM	MSB G-609
CBMM N594C	Regional Gross Anatomy: Back & Extremities	Aleksey Tentler tentler.md@rutgers.edu 973-972-1687	Open to Masters & PhD students.	3	N	Thursday	1/30	5/8	12:00 PM	2:00 PM	TBD
CBNP 5030Q	Clinical Neuroimmunology	Amjad Ilyas ilyasaa@njms.rutgers.edu 973-972-3580	Open to Masters & PhD students. Fundamentals of Neuroscience (NEUR 5200Q) and Immunology A (PATH 511A) or Molecular Cellular Immunology (PATH 5210), or permission of course director.	2	N	Monday & Wednesday	2/24	4/16	5:30 PM	7:30 PM	MSB H-506
CBNP 5032Q	Behavioral and Cognitive Neuroscience	Richard Servatius servatrj@njms.rutgers.edu 973-676-1000 ext 3678		2	N	Tuesday & Thursday	4/22	6/12	3:00 PM	5:00 PM	MSB H-506
CBNP 5033Q	Systems Neuroscience	Richard Servatius servatrj@njms.rutgers.edu 973-676-1000 ext 3678		2	N	Tuesday & Thursday	2/25	4/17	3:00 PM	5:00 PM	MSB H-506 *Note: Class in MSB H-609B on 02/25

CBNP 5034Q	Biology of Vascular Disease	Annie Beuve beuveav@njms.rutgers.edu 973-972-8895 Walter Duran duran@njms.rutgers.edu 973-972-4372	Open to Masters & PhD students. IBMS (GSND 5200Q) and Molecular Physiology of Cell Communication (CBNP 5036Q) or Cardiovascular Systems (CBNP 5035Q). Permission of course director for Masters students is required.	2	N	Tuesday  Wednesday	5/6  6/11	10:45 AM  12:45 PM	12:45 PM  12:00 PM	MSB H-609B
CBNP 5037Q	Regenerative Medicine	Elizabeth Moran moranel@njms.rutgers.edu 973-972-5854 Steve Levison levisow@njms.rutgers.edu 973-972-5162	Open to Masters & PhD students. Background in cell biology and development suggested	2	N	Monday & Wednesday	4/21  6/13	1:00 PM  3:00 PM	3:00 PM  3:00 PM	MSB B-540 E+F
CBNP 5068Q	Molecular Mechanisms of Diseases	Yongkyu Park parky1@njms.rutgers.edu 973-972-2969	Open to Masters & PhD students. Background in Cell and Molecular Biology	3	N	Monday	2/3  5/19	6:00 PM  9:00 PM	9:00 PM  9:00 PM	MSB G-609
CBNP 5140Q	Topics in Neuroimmunology	Christine Rohowsky-Kochan rohowskm@njms.rutgers.edu 973-972-7394	Open to Masters & PhD students. Immunology A (PATH511A) or Molecular & Cellular Immunology (PATH5210Q) or permission of course director	2	N	Monday & Wednesday	4/21  6/13	5:00 PM  7:00 PM	7:00 PM  7:00 PM	MSB H-506
CBNP 5250Q	Introduction to Neurochemistry & Neuropharmacology	Eldo Kuzhikandathil kuzhikev@njms.rutgers.edu 973-972-1157 Gusheng Wu gwu@njms.rutgers.edu 973-972-7988 Robert Ledeen ledeenro@njms.rutgers.edu 973-972-7989	Open to Masters & PhD students. Fundamentals A (GSND N500A), or IBMS (GSND 5200Q), or permission of course director. Limit of 50. At least 5 students need to enroll, for the course to be offered.	2	N	Tuesday & Thursday	4/22  6/12	5:30 PM  7:30 PM	7:30 PM  7:30 PM	MSB H-506
CBNP 5255Q	Endocrinology of Growth & Metabolism	Nicholas Illsley illsleni@njms.rutgers.edu 551-996-8122	Open to Masters & PhD students. ENROLLMENT CLOSED.	1	N	Wednesday	4/23  6/11	4:00 PM  6:00 PM	6:00 PM  6:00 PM	MSB B-617
CBNP 5260Q	Molecular Basis of Synaptic Disorders	Joseph McArdle mcardle@njms.rutgers.edu 973-972-4428	Open to Masters & PhD students.	1	N	Wednesday	3/5  5/14	4:30 PM  6:30 PM	6:30 PM  6:30 PM	MSB H-609B
DENT 5025Q	Fundamentals of Dental Materials Science	Anil Ardesna ardeshap@sdm.rutgers.edu 973- 972-1892	Open to Masters & PhD students. Enrollment limit 50.	1	N	Friday	1/10  3/7	9:00 AM  11:00 AM	11:00 AM  11:00 AM	Oral Health Pavilion B-961 *Note: Class in MSB B-610 on March 7th

DENT 5085Q	Dental Biochemistry	Suriender Kumar kumarsu@njms.rutgers.edu 973-972-4750	Open to Masters & PhD students. This is a Dental School course. Limited intake of 15 students only. Special permission required from: Vincent K. Tsiagbe 973-972-2612 tsiagbvk@sdm.rutgers.edu.	4	N	Monday (Jan-Mar)	1/6	6/20	10:00 AM	11:50 AM	Oral Health Pavilion B-961
						Wednesday (Jan-Mar)			11:00 AM	11:50 AM	
						Thursday (Mar-Jun)			10:00 AM	11:50 AM	
						Friday (Mar-Jun)			11:00 AM	12:50 PM	
DENT 5220Q	Methods in Microscopic Imaging	Kabilan Velliyagounder velliya@sdm.rutgers.edu 973-972-5051	Open to Masters & PhD students. Enrollment Limit 12.	2	N	Wednesday	1/8	4/23	1:00 PM	3:00 PM	Cancer Center F-1196 *Note: Class in MSB B-617 on 4/9
DENT 5310Q	Oral Immunology	Vincent Tsiagbe tsiagbvk@sdm.rutgers.edu 973-972-2612	Open to Masters & PhD students. Limit of 65 students.	3	N	Wednesday	1/8	4/10	8:00 AM	8:50 AM	Lectures 1-35 in Oral Health Pavilion B-963 and Lectures 36-49 in MSB B-554
						Thursday			2:00 PM	4:50 PM	
DENT 5910Q	Oral Biology Research Seminar	Scott Kachlany kachlansc@sdm.rutgers.edu 973-972-3057	Open to Masters & PhD students.	1	N	Friday	1/24	4/11	1:00 PM	2:00 PM	MSB C-600
GSND 5008Q	QA/QI Research in Clinical Settings	Ping-Hsin Chen chenpi@njms.rutgers.edu 973-972-7351 Steven Keller skeller@njms.rutgers.edu 973-972-5036	Open to Masters & PhD students. Maximum of 20 students and Immunizations according to Rutgers policy.	3	N	Wednesday	1/15	4/23	Lecture 12:00 PM Lab 2:00 PM	Lecture 2:00 PM Lab 4:00 PM	MSB B-518/544 *Note: Class will be in MSB B- 520/546 on 2/5, 2/19, 3/12, 4/9, and 4/23
GSND 5113Q	Gene Expression	Emanuel Goldman egoldman@njms.rutgers.edu 973-972-4483 x4367	Open to Masters & PhD students. ENROLLMENT CLOSED.	3	N	Monday & Thursday	5/1	6/30	2:20 PM	5:00 PM	ICPH Auditorium
GSND 5300Q	Independent Study in Biomedical Sciences	BJ Wagner wagner@njms.rutgers.edu 973-972-5335		1 to 4	S	By Arrangement					
GSND 5315Q	The Nature, Science and NEJM Course A	Eric Altschuler altschel@njms.rutgers.edu 973-972-5439	Open to Masters & PhD students.	1	N	Monday	1/6	4/28	5:00 PM	6:00 PM	MSB B-540 A+B
GSND 5316Q	The Nature, Science and NEJM Course B	Eric Altschuler altschel@njms.rutgers.edu 973-972-5439	Open to Masters & PhD students. Students receiving permission to take GSND 5315Q more than once will register for this. Permission of program director (Master's) or class advisor/track director (PhD) required.	1	S/U	Monday	1/6	4/28	5:00 PM	6:00 PM	MSB B-540 A+B

GSND 5320Q	Pharmacology and Drug Marketing	David Segarnick segarndj@njms.rutgers.edu 973-996-2367	Open to Masters & PhD students. Principles of Pharmacology (PHPY 5020) or Fundamentals of Pharmacology (PHPY N5021) or Principles of Toxicology (PHPY N5225).	2	N	Monday	1/6	4/28	7:00 PM	9:00 PM	MSB B-601
GSND N500B	Fundamentals of Biomedical Science Part B: Cellular Biology	Diego Fraidenaich fraidedi@njms.rutgers.edu 973-972-5525	Open to Masters students only.	3	N	Wednesday	1/15	5/14	6:00 PM	9:00 PM	MSB B-552 *Note: Class in Dental School B-963 on 01/22 and 01/29 and MSB B-556 on 02/05*
MBGC 5002Q	Introduction to Genomics, Proteomics, and Bioinformatics	Hong Li liho2@njms.rutgers.edu 973-972-1865	Open to Masters & PhD students. IBMS (GSND 5200Q) or Fundamentals A (GSND N500A) or permission of the course director.	2	N	Tuesday & Thursday	2/25	4/17	2:00 PM	4:00 PM	Cancer Center G-1196
MBGC 5030Q	Protein Dynamics in Health & Disease	Carolyn Suzuki suzkick@njms.rutgers.edu 973-972-1555	Open to Masters & PhD students. IBMS (GSND 5200Q), or MGM (GSND 5201Q), or GMM (GSND 5205Q), or permission of course director.	2	N	Monday & Wednesday	4/21	6/11	5:00 PM	7:00 PM	MSB B-540 C+D
MICR 5231Q	Molecular Virology	Hua Zhu zhuhu@njms.rutgers.edu 973-972-4483 ext 26488	Open to Masters & PhD students. Fundamentals A (GSND N500A), or IBMS (GSND 5200Q), or MGM (GSND 5210Q), or permission of course director.	3	N	Monday, Tuesday & Thursday	5/29	7/1	5:30 PM	8:30 PM	ICPH Auditorium
MICR N5233	Microbes and Infectious Disease	Stephen Garrett garretst@njms.rutgers.edu 973-972-0323	Open to Masters & PhD students.	3	N	Tuesday	1/7	4/29	2:00 PM	5:00 PM	MSB B-610
MSBS 5000Q	Masters Thesis Research	BJ Wagner wagner@njms.rutgers.edu 973-972-5335		5	S/U	By Arrangement					
MSBS 5120Q	Pharmaceutical Internships	BJ Wagner wagner@njms.rutgers.edu 973-972-5335	Open to Masters & PhD students. Permission of the course director.	2 to 3	S/U	By Arrangement					
MSBS 5125Q	Teacher Training Internship	BJ Wagner wagner@njms.rutgers.edu 973-972-5335	Open to Masters & PhD students. Permission of Dr. Wagner.	1 to 3	S/U	By Arrangement					
MSBS 5145Q	Molecular Genetics	David Kaback kaback@njms.rutgers.edu 973-972-4483 ext. 28967	Open to Masters students only. Permissions of instructor plus B or better in undergraduate course in cell biology, genetics of biochemistry.	2	N	Monday, Wednesday, & Friday	1/6	2/21	9:30 AM	11:00 AM	MSB B-619 B+C *Note: Class in MSB B-518 on 2/7*
MSBS 7000Q	Masters Thesis Continuation	BJ Wagner wagner@njms.rutgers.edu 973-972-5335	Prior registration for MSBS 5000Q. Use Master's Thesis Continuation Form; Permission of Mentor & Dr. Wagner.	1 to 8	S/U	By Arrangement					

MSBS 593AQ	Research in Biomedical Sciences	Stephen Garrett garretst@njms.rutgers.edu 973-972-4511	<b>Masters students only. Use this course # for the first rotation</b>	2	N	<b>By Arrangement</b>					
MSBS 593BQ	Research in Biomedical Sciences	Stephen Garrett garretst@njms.rutgers.edu 973-972-4511	<b>Masters students only. Use this course # for the second rotation (special permission required)</b>	2	S/U	<b>By Arrangement</b>					
MSBS N5010	Seminar in Homeland Security & Domestic Preparedness	Brendan McCluskey mclluske@ca.rutgers.edu 973-445-9083	<b>Open to Masters &amp; PhD students. Maximum 20 students.</b>	2	N	<b>Monday</b>	1/27	5/5	5:00 PM	7:00 PM	MSB B-609 B+C
MSBS N5134	Hematopoietic Stem Cell Biology	Pranela Rameshwar rameshwa@njms.rutgers.edu 973-972-0625	<b>Open to Masters &amp; PhD students. Background in cell biology and stem cell biology suggested.</b>	2	N	<b>Monday</b>	1/20	3/24	6:00 PM	8:00 PM	MSB B-610
MSBS N512Q	Topics in Cancer Stem Cell Biology	Pranela Rameshwar rameshwa@njms.rutgers.edu 973-972-0625	<b>Open to Masters &amp; PhD students.</b>	2	N	<b>Tuesday &amp; Thursday</b>	6/3	7/8	6:00 PM	8:00 PM	MSB B-610
MSBS N517Q	Introduction to Select Agent Biology	Nancy Connell connell@njms.rutgers.edu 973-972-3759	<b>Open to Masters &amp; PhD students.</b>	2	N	<b>Monday &amp; Wednesday</b>	1/20	3/19	3:00 PM	5:00 PM	MSB B-522/B-548 <b>Note:</b> Class in MSB B- 617 on 3/3
NEUR 5010Q	Medical Neuroscience	Amjad Ilyas ilyasaa@njms.rutgers.edu 973-972-3580	<b>Online registration not permitted. Contact Dr. Garrett for approval.</b>	4	N	<b>Monday through Friday</b>	4/9	5/30	9:00 AM	3:00 PM	<b>TBD</b>
NEUR 5240Q	Demyelinating Diseases	Teresa Wood woodte@njms.rutgers.edu 973-972-6529	<b>Open to Masters &amp; PhD students. Cellular &amp; Developmental Neuroscience (CBNP 5150Q). Permission of course director for Masters students is required.</b>	1	N	<b>TBD</b>	3/31	5/23	<b>TBD</b>	<b>TBD</b>	<b>TBD</b>
NEUR N5040	Neurobiology of Disease	Kevin Beck beckkd@njms.rutgers.edu 973-676-1000 x3682 Stella Elkabes elkabest@njms.rutgers.edu 973-972-5163	<b>Open to Masters &amp; PhD students. Fundamentals of Neuroscience (NEUR 5200Q) or permission of course director.</b>	3	N	<b>Thursday</b>	1/23	5/1	5:30 PM	8:30 PM	Cancer Center G-1196
PATH 5080Q	Immunoglobulins in Host Defense Disease	Frederick Coffman coffmafd@njms.rutgers.edu 973-972-2861	<b>Open to Masters &amp; PhD students. Permission of the course director. <b>COURSE CANCELLED.</b></b>	1	N	<b>Wednesday</b>	2/5	5/14	1:00 PM	2:00 PM	<b>TBD</b>
PATH 511BQ	Immunology B	Dr. Elizabeth Raveche raveches@njms.rutgers.edu 973-972-5240	<b>Successful completion of Immunology A (PATH 511A).</b>	1	N	<b>Monday &amp; Wednesday</b>	1/6	2/3	4:30 PM	6:00 PM	MSB C-555

PHPY 5005Q	Fundamentals of Human Physiology	Krista Blackwell blackwkn@njms.rutgers.edu 973-972-2863	Open to Masters students only.	3	N	Monday	1/27	5/5	2:00 PM	5:00 PM	Dental School B-963
PHPY 5010Q	Medical Physiology	Krista Blackwell blackwkn@njms.rutgers.edu 973-972-2863	Open to Masters students only. Online registration not permitted. Contact Dr. Stephen Garrett for approval.	5	N	Monday through Friday	1/23	4/8	9:00 AM	2:00 PM	TBD
PHPY 5085Q	Neuroendocrinology: Regulation of Physiological Processes	Vanessa Routh routhvh@njms.rutgers.edu 973-972-1489	Open to Masters & PhD students. IBMS (GSND 5200Q) or Fundamentals A (GSND N500A), or permission of course director. Physiological Principles (PHPY 5290) and/or Foundations in Neuroscience (NEUR 5110) suggested but not required.	2	N	Tuesday & Thursday	3/11	5/1	4:30 PM	6:30 PM	MSB H-609
PHPY 5280Q	Gastrointestinal Physiology and Nutrition	Ronaldo Ferraris ferraris@njms.rutgers.edu 973-972-4519	Open to Masters & PhD students. Biochemistry and Physiology suggested.	1	N	Tuesday	4/29	6/10	4:00 PM	6:00 PM	MSB B-609 B+C
PHPY N5030	Topics in Pharmacology	Richard D. Howland howland@njms.rutgers.edu 973-972-4388	Open to Masters students only. Some Physiology recommended.	3	N	Thursday	1/16	5/15	6:00 PM	9:00 PM	TBD
PHPY N526Q	Principles of Toxicology II	Ramez Labib ramezlabib@yahoo.com Thomas Visalli tvis624@yahoo.com	Open to Masters & PhD students.	3	N	Tuesday	2/11	5/13	6:00 PM	9:00 PM	MSB B-556

Last Update:01/29/14 BS

**Required/Recommended Text for courses**

<b>BIOC 5100Q</b>	<i>Molecular Oncology</i>	R.A. Weinberg. The Biology of Cancer, Garland Science, New York, NY, 2014
<b>CBMM N594C</b>	<i>Regional Gross Anatomy: Back &amp; Extremities</i>	Moore Clinically Oriented Anatomy, 7th Edition, by Keith L. Moore and Arthur Dalley, Lippincott Williams & Wilkins - older versions acceptable
<b>CBNP 5034Q</b>	<i>Biology of Vascular Disease</i>	"Physiology" (Berne and Levy) and Molecular Cell Biology (Landish).
<b>CBNP 5250Q</b>	<i>Introduction to Neurochemistry &amp; Neuropharmacology</i>	Basic Neurochemistry, Eighth Edition: Principles of Molecular, Cellular, and Medical Neurobiology
<b>DENT 5310Q</b>	<i>Oral Immunology</i>	<b>Recommended:</b> Janeway's Immunology, 8th edition, 2012. ISBN: 978-0-8153-4243-4, see syllabus for others
<b>DENT 5085Q</b>	<i>Dental Biochemistry</i>	Lippincott's Illustrated Reviews in Biochemistry, 6th North American Ed. ISBN-13:978-1451175622. See Syllabus for more
<b>GSND N500B</b>	<i>Fundamentals of Biomedical Science</i>	<b>Recommended Textbook(s)</b> - Most of the lectures are based on chapters from different books. Essential Cell Biology 2nd edition by Alberts et al., 2004, Garland. Molecular Biology of the Cell by Alberts et al., Garland. Molecular Cell Biology, 5th edition, by Lodish et al., 2003, Freeman. The Cell a Molecular Approach by Cooper
<b>MSBS N5134</b>	<i>Hematopoietic Stem Cell Biology and Dysfunction</i>	<b>Recommended:</b> Clinical Hematology, Edited by Neal S. Young, Stanton L. Gerson and Katherine A. High. Mosby Elsevier, ISBN 0-323-01908-0
<b>MBGC 5002Q</b>	<i>Introduction to Genomics, Proteomics &amp; Bioinformatics</i>	<b>Recommended Textbooks:</b> Discovering Genomics, Proteomics & Bioinformatics (2nd Edition. 2006) Campbell A. M. & Heyer L. J. (Benjamin Cummings).
<b>PATH 511BQ</b>	Immunology B	Janeway's Immunobiology 8th Edition, Garland Scientific
<b>PHPY 5085Q</b>	<i>Neuroendocrinology: Regulation of Physiological</i>	Neuroendocrinology in Physiology and Medicine by P. Michael Conn and Marc Freeman
<b>PHPY N5030</b>	<i>Topics in Pharmacology</i>	<b>Recommended:</b> Principles of Pharmacology, Golan, Tashjian, Armstrong & Armstrong, 3rd edition, Wolters Kluwer, 2012