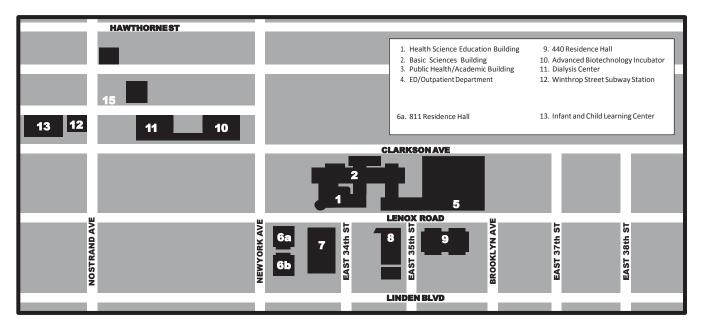
**BULLETIN 2018-2023** 

# **SUNY Downstate Medical Center**

**School of Public Health** 



# Transportation to SUNY Downstate

The SUNY Downstate Admissions Office is located at 450 Clarkson Avenue, just off New York Avenue (Building 2).

#### BY AUTOMOBILE From Manhattan:

Manhattan Bridge: exit onto Flatbush Avenue. Continue approximately three and one-half miles to Parkside Avenue. Turn left onto Parkside Avenue and travel four blocks to New York Avenue. Turn right at New York Avenue and continue one block to Clarkson Avenue.

Brooklyn Bridge: stay to the left at the end of the bridge, following the ramp to Boerum Place, which becomes Adams Street. Continue along Adams Street to Atlantic Avenue. Turn left onto Atlantic Avenue and continue to Flatbush Avenue. Turn right onto Flatbush Avenue and continue approximately two and one-half miles to Parkside Avenue. Turn left onto Parkside Avenue and travel four blocks to New York Avenue. Turn right at New York Avenue and continue one block to Clarkson Avenue.

Brooklyn-Battery Tunnel (toll): exitonto the Brooklyn-Queens Expressway. Continue approximately one mile, staying to the left, and exit onto Prospect Expressway. Travel three exits to the Fort Hamilton Parkway exit. Continue through two traffic lights to Caton Avenue. Turn left onto Caton Avenue, and continue sixteen blocks to Flatbush Avenue. Turn left onto Flatbush Avenue and continue two blocks to Parkside Avenue. Turn right onto Parkside Avenue. Turn right at New York Avenue and continue one block to Clarkson Avenue. From Staten Island and Newark International Airport:

Verrazano Narrows Bridge (toll): follow bridge to Route 278, the Gowanus Expressway. Travel approximately five miles to the Prospect Expressway exit. Continue on the Prospect Expressway three exits to the Fort Hamilton Parkway exit. Travel along East 5 Street through two traffic lights to Caton Avenue. Turn left onto Caton Avenue, and continue sixteen blocks to Flatbush Avenue. Turn left onto Flatbush and continue two blocks to Parkside Avenue. Turn right onto Parkside Avenue and travel four blocks to New York Avenue. Turn right at New York Avenue and continue one block to Clarkson Avenue.

From Long Island and Airports: Southern Long Island and JFK: Weston Belt Parkway to North Conduit Boulevard exit (Exit 17W). Continue on North Conduit Boulevard for about 3/4 mile. Fork left onto Linden Boulevard, and take Linden Boulevard to New York Avenue. Right two blocks on New York Avenue to Clarkson Avenue.

Northern Long Island and LaGuardia: Take Grand Central Parkway to Jackie Robinson Pkwy (formerly Interboro Pkwy). Continue to Pennsylvania Avenue exit. Follow Pennsylvania to Linden Boulevard, turn right onto Linden. Take Linden Boulevard to New York Avenue. Right two blocks on New York Avenue to Clarkson Avenue.

#### PARKING

Valet Parking is available Mondays through Fridays from 6:00 a.m. to 6:00 p.m., located in front of the 445 Lenox Road hospital entrance at the valet parking booth. The fee is \$10.00 (this service is not available on weekends or holidays). When the valet parking service is not available, a limited number of spaces for visitors are available at a nominal cost at the Center's Parking Garage on East 34th Street, between Linden Boulevard and Lenox Road. There are also several private parking lots in the area.

#### **BY RAILROAD**

#### Long Island Railroad

Take any train to the Jamaica station. Change to Brooklyn-bound train (track 3). Take to the Flatbush Avenue terminal. Follow subway directions from there.

#### Metro-North Railroad

Take any train to Grand Central Terminal. Change to Brooklyn-bound 4 or 5 trains. Follow subway directions from there.

#### BY SUBWAY

During rush hour, take the IRT Flatbush Avenue Line (#2 Seventh Avenue or #5 Lexington Avenue) trains to the Winthrop Street station. [Take any IRT Brooklyn-bound train (#2, 3, 4 or 5) to Nevins Street in Brooklyn, changing there for a #2 or #5 marked "Flatbush Avenue." Note that the # 5 runs only during rush hours.] Exit at Nostrand and Parkside avenues. Cross Nostrand Avenue and walk one block on Parkside Avenue until it ends at New York Avenue. Turn right onto New York Avenue. Cross New York Avenue until the entrance at 450 Clarkson Avenue. The Admissions Office is located at 450 Clarkson Avenue.

Nights and outside of rush hours, take the subway to Church Street. Walk three short blocks east on Church Avenue to New York Avenue, left three blocks to Clarkson Avenue, right to 450 Clarkson Avenue. Or transfer to an eastbound B-35 bus to the northbound B-44 at Church and New York avenues. (Downstate students and employees can call 718-270-2626 to arrange for transportation from Church Avenue.)

#### BY BUS

The B-12 and northbound B-44 buses stop at the corner of Clarkson and New York Avenues. The following lines connect with the B-12 along Clarkson Avenue: B-41, B-44, B- 46, and B-49.

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# **SUNY and Downstate Administration**

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# **SUNY Downstate Medical Center**

SUNY Downstate Medical Center - formally known as the State University of New York Health Science Center at Brooklyn - is one of four academic health centers within the 64-unit State University of New York. SUNY Downstate comprises the College of Medicine, School of Graduate Studies, College of Nursing, College of Health Related Professions, School of Public Health, University Hospital of Brooklyn, a major research center, and several biotechnology incubators.

SUNY Downstate is a major provider of medical education, health care, and research. It is the focal point of a health education network that encompasses numerous other healthcare sites. Downstate grants BS, MS, MPH, MD, DrPH, DPT, and PhD degrees. It has a total student body of over 1,800 and roughly 4,100 faculty (including full-time, parttime, and voluntary members).

Research is an integral part of a Downstate education. In 1998, one of its faculty in physiology and pharmacology, Dr. Robert F. Furchgott, received the Nobel Prize for medical research.

# MISSION, VISION, AND VALUES

#### Mission

SUNY Downstate Medical Center — Brooklyn's Academic Medical Center

- To provide outstanding education of physicians, scientists, nurses and other healthcare professionals
- To advance knowledge through cutting edge research and translate it into practice
- To care for and improve the lives of our globally diverse communities
- To foster an environment that embraces cultural diversity

#### Vision

We will be nationally recognized for improving people's lives by providing excellent education for healthcare professionals, advancing research in biomedical science, health care and public health, and delivering the highest quality, patient-centered care.

#### Values

**PRIDE** To take satisfaction in the work we do every day, and to value our collective contributions to the Downstate community.

**P**rofessionalism We commit to the highest standards of ethical behavior and exemplary performance in education, research, and patient care.

*Respect* We value the contributions, ideas and opinions of our students, coworkers, colleagues, patients and partnering organizations.

*Innovation* We research and develop new and creative approaches and services for the anticipated changes in healthcare.

*Diversity* We embrace our rich diversity and commit to an inclusive and nurturing environment.

*Excellence* We commit to providing the highest quality of education and service to our students, patients and community by holding ourselves, our coworkers and our leaders to high standards of performance.

# SUNY DOWNSTATE COLLEGE OF MEDICINE

The College of Medicine grants the MD degree; it also sponsors, with the School of Graduate Studies, a combined MD/PhD degree. The College of Medicine curriculum is organ-based. Medical students can earn a Master of Public Health degree from the School of Public Health, while at the same time earning their MD degree. Some students choose to complete the MPH by taking summer courses starting before the first year of medical school. Others take a year off between the third and fourth year of medical school to complete the MPH.

### SCHOOL OF GRADUATE STUDIES

The School of Graduate Studies offers three PhD degree-granting programs: Molecular and Cellular Biology, Neural and Behavioral Science, and a joint PhD program in Biomedical Engineering in collaboration with the Brooklyn campus of NYU Polytechnic University. Students should consult the website www.downstate.edu/grad for the most recent information on program offerings.

#### ACCREDITATION

SUNY Downstate is accredited by the Middle States Commission on Higher Education. The College of Medicine is fully accredited by the Liaison Committee on Medical Education.

# **The Founding of Downstate Medical Center**

SUNY Downstate Medical Center had its beginnings as a small charitable medical service set up in 1856 by a group of German physicians. This free dispensary, organized to treat indigent German-Americans living in Brooklyn, was staffed by five physicians. The original intention was to build a large hospital to care for the German population of Brooklyn. But changing population trends, which brought a largely Irish patient load to the dispensary, necessitated a revision of this plan.

In 1857, physicians from the German General Dispensary, then located on Court Street, resolved to organize a charitable institution in the City of Brooklyn, to be called St. John's Hospital. From November 7 until December 23 of that year, the dispensary was called The St. John's Hospital; on December 23, the name of the hospital was changed to The Long Island Hospital and Medical College. It was on this date that a medical college with a hospital was first projected.

Dr. Louis Bauer and Dr. John Bryne, the prime movers in the establishment of the medical college, were trained in Europe, where it was customary for medical schools to be associated with hospitals. The two physicians naturally wanted to adopt this system to prepare the future physicians of Brooklyn. A bill to incorporate the Long Island College Hospital of the City of Brooklyn was introduced in the State Legislature on January 20, 1858, and passed on March 6. The hospital's charter empowered 25 regents to operate a hospital and to confer degrees on candidates 21 years of age or older, who had passed three years of preceptorship under a practicing physician and completed two courses of lectures at the hospital.

Almost immediately after the charter was signed, the Perry Mansion, located in Brooklyn Heights, was purchased to house the new medical complex. The official inauguration of the Long Island College Hospital took place June 3. Financial difficulties beset the new institution almost immediately, slowing down efforts to open the medical school. The hospital itself was forced to close in late September 1859. Meanwhile, several outstanding physicians were secured to fill the professor-ships at the college, and on March 29, 1860, the institution reopened, following financial arrangements underwriting the expense of the collegiate department and settling various liens.

The following day, the instruction of students began. The first teaching faculty was a distinguished one. Most eminent of all was Dr. Austin Flint, Sr., professor of practical medicine and pathology, who had been a professor of medicine at Rush Medical College in Chicago.

A medical student's training in 1860 consisted of his three-year preceptorship under the direction of a practicing physician and attendance at two courses of lectures of at least sixteen weeks each. The lectures that were given one year were repeated the next, sometimes verbatim, so many students took their first course of lectures at one school and their second at another. The first class had 57 students, as well as a number of graduates of other institutions. The first commencement took place July 24, 1860, with 21 students graduating.

In 1861, in anticipation of the medical needs of the Civil War, the curriculum included a one-month course on military surgery, dissection, and clinical instruction on the wards. By 1869, major changes were introduced into the teaching curriculum.

Daily class examinations were instituted to ensure more exact knowledge, especially in the demonstrative and elementary branches. Another change, made in 1872, was the establishment of a reading and recitation term that began early in October and extended to the beginning of the regular term in March. This term included dissection and clinical instruction as well as reading and quizzes.

By 1879, the faculty of the Long Island College Hospital concluded that the system of teaching medicine in the United States was radically wrong. They debated the possibility of instituting a compulsory, full-graded, three- year course of instruction, but abandoned the idea because of their fears that such a plan would result in the loss of many students, when the college was entirely dependent for its existence on students' fees. Certain changes were made, however, to improve the curriculum. The regular term was lengthened from sixteen weeks to five months, but the four-month reading and recitation term remained optional. Thus, a total of eighteen months' instruction was available to any student electing two regular and two reading and recitation terms.

Between 1888 and 1897, the Long Island College Hospital grew rapidly. The Hoagland Laboratory building, built primarily for research in bacteriology, was constructed. At its opening, it was considered one of the best-equipped buildings for research and medical training in the country. In December 1897, the Polhemus Memorial Clinic Building was completed. The new building, eight stories high, was erected on the southwest corner of Henry and Amity streets. By this time, New York State law required that a student take three courses of lectures in three different years. The system of having a regular term of five months and an optional reading term was retained. The entering class of 1897-1898 began the first four-year graded course of instruction. The reading term was abolished, and the school year lasted seven months. In 1897, the student fees were raised to \$185 and \$190. In the period from 1889 to 1909, the average number of students in the school was 310, and the average number in the graduating class was 62.

During the years immediately before and after World War I, many additional changes occurred at Long Island College Hospital. Admission was opened to women; postgraduate teaching was instituted; a new wing increased the number of beds to 500; and affiliations were established with other Brooklyn hospitals.

In 1930, the college and hospital were separated from one another so that each would be under its own governing board. The college was conducting much of its clinical teaching in other hospitals throughout the borough, and it seemed preferable that it not be governed by the board of only one hospital. The college became the Long Island Collegeof Medicine. Other changes occurring during the 1930s included the construction of the Polak Memorial Laboratory, housing laboratories in bacteriology, histology, physiology, pathology, gynecology, and surgery. In 1935, 500 beds at Kings County Hospital were set aside in a college division for the clinical instruction of students.

In the 1940s, full-time chiefs were appointed in all the clinical departments, training in psychiatry was offered within a separate department, and Maimonides Hospital and the Veterans Administration Hospital in Fort Hamilton became affiliates, along with a number of other local hospitals. In 1946, the third-year curriculum was changed so that nearly two-thirds of the work consisted of clinical clerkships.

In 1945, the college purchased a six- and-ahalf-acre tract of land that eventually became the site of Downstate Medical Center. After approval by a faculty committee and the board of trustees of the Long Island College of Medicine, the board of managers of the Alumni Association, the trustees of the State University of New York, and the State Board of Regents, the State Legislature in 1950 passed a bill legalizing the merger of the Long Island College of Medicine and the State University to form Downstate Medical Center. The establishment in 1966 of the School of Graduate Studies, the College of Health Related Professions, and the College of Nursing; the construction of the Basic Sciences Building in 1956; student residence halls in 1965; State University Hospital in 1966; the Student Center in 1967; the nurses' residence in 1968; and the Health Science Education Building in 1992 completed the transition of the medical school as it is now known from its early days as the German General Dispensary on Court Street.\*

Excerpted with permission from the New York State Journal of Medicine, July 1976. Itwas reprintedin Alumni Today, Spring 1996, with the permission of the Medical Society of the State of New York.

\*Update: Since this account was written, the medical center has expanded even further. The School of Public Health was established in 2009, and in 2011, Downstate acquired Long Island College Hospital, thus reuniting with its historic past.

# School of Public Health Academic Concentrations and Degrees

# **Concentration / Degree Options:**

Community Health Sciences: MPH, DrPH Environmental and Occupational Health Sciences: MPH, DrPH Epidemiology: MPH, DrPH Biostatistics: MPH Health Policy and Management: MPH

# Additional options:

MD/MPH – available in all 5 concentrations Advanced Certificate in Public Health – MPH core courses

Located in the heart of Brooklyn, SUNY Downstate Medical Center has a rich legacy of excellence in education, research, and community service. Downstate's School of Public Health, with roots beginning in 2001, now stands at the forefront of public health education for urban and immigrant populations. Our exciting vision is one full of hope, possibility, challenges, and eventually, greater health equity for all.

Our ultimate goal is to promote health and prevent disease in the population as a whole. Thus, our approach moves past preventive services provided to individual patients in clinical settings (though this approach is extremely important). Our faculty and students adopt a population-based perspective on pressing health issues, through health education campaigns, screening and prevention programs, epidemiologic analysis of health problems, and consideration of implications for health policy.

We are committed to advancing the health of Brooklyn, and to the larger world that contributes to its amazing diversity. Brooklyn is a borough of immigrants. We know from careful statistical analysis that many common diseases disproportionately affect the residents of Brooklyn. In response, our academic curriculum places unique emphasis on the health needs of our urban and immigrant populations. Our Center for Global Health was created to enhance global approaches to achieving health equity both locally and abroad. Public health students contribute to this goal through practical field experiences in New York City and overseas.

Our programs are nationally accredited by the Council on Education for Public Health and the Middle States Commission on Higher Education. We offer Master of Public Health (MPH) degrees in 5 concentrations, as well as Doctor of Public Health degrees in 3 concentrations, for the next generation of public health practitioners. Our 15-credit Advanced Certificate in Public Health has served as a springboard to a wider public health education for many. The School of Public Health is home to faculty who are nationally recognized public health leaders, distinguished in their respective specialties through teaching, research, and service. Faculty and student projects often include collaboration with Downstate's College of Medicine, College of Nursing, College of Health Related Professions, and School of Graduate Studies, as well as with community-based organizations and Downstate's University Hospital of Brooklyn and its affiliated teaching hospitals and institutions. This provides our students with easy access to the rich diversity of faculty expertise found in the only academic medical center in Brooklyn.

Our student body is as diverse as the populations we serve. We welcome students from a broad range of professional backgrounds. We provide public health training to recent college graduates, nurses, lawyers, administrators, physician assistants, medical students, and physicians. We highly value the unique perspectives all of our students bring to the public health learning experience.

# **Academic Departments**

# COMMUNITY HEALTH SCIENCES (CHSC)

Community Health Sciences is committed to training a new generation of public health practitioners who are skilled in articulating and assessing contemporary public health challenges within a social-ecological framework and developing and applying community-engaged, evidence-based approaches to advancing the health of urban and immigrant populations in Brooklyn and around the world. The department offers state-of-the-field graduate curricula, distinguished by several unique features including classes that integrate service learning experiences in the community and an optional overseas field practicum.

### Unique features:

In the Field: All of our MPH and DrPH core courses include time spent in communities: contributing to, observing, and learning about the health of local neighborhoods.

*Global Emphasis:* When we study immigrant communities, we simultaneously study the countries of origin for those immigrants. In a CHSC course, you will find assigned readings focusing on urban communities around the world.

Community Research with Faculty: Graduate students have the opportunity to work with CHSC faculty on innovative research studies serving the health goals of local communities as well as those across the country and in other parts of the world.

Here in Brooklyn we collaborate with community-based organizations, such as the Arthur Ashe Institute and CAMBA, in developing and evaluating interventions for pressing health issues.

The community interventions we research cover a wide range of channels, from in-person outreach in barbershops, beauty salons, and restaurants, to supportive outreach through cell-phone counseling.

**Overseas Field Experiences:** The department sponsors a field experience in Limpopo province of South Africa, where students work side by side with South African health practitioners in disseminating health services to impoverished communities. Similar experiences are sponsored in Haiti and Trinidad.

# ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES (EOHS)

Environmental and Occupational Health Sciences provides graduate education, engages in public health practice, and conducts both basic and applied research. The faculty is actively engaged in research and teaching on the assessment, control, and prevention of environmental and occupational chemical, biological, physical, and work organization hazards, and in better understanding their impacts on human health and safety.

# Unique features:

A special focus of the department is the impact of the urban built environment on public health. We view the "built environment" broadly to include:

- Proximity to public amenities such as parks and recreation facilities.
- The availability of healthy (and unhealthy) sources of food.
- The physical environment, including air pollution and unhealthy buildings.
- The social environment, including violence and socioeconomic disadvantage.

Together with other departments at SUNY Downstate and with community groups, we are developing a geographic information system for Brooklyn that uses state-of-the-art database utilities and mapping software to better understand risks and rates of disease, and for developing programs to improve the health of Brooklyn's citizens.

Other faculty interests include:

- The health and safety of public employees in New York City and State.
- Reducing health disparities due to environmental and occupational hazards and socioeconomic status.
- Programs for balancing work and family, reducing workplace violence and reducing work stress.
- Risks to maternal-fetal health from environmental contaminants.

Occupational and environmental health often involves multidisciplinary teams, and we therefore work closely and collaboratively with other departments throughout SUNY Downstate Medical Center, in the basic and clinical sciences, city, state, and federal agencies, community organizations, labor unions, and others.

The Department offers students exciting opportunities for graduate education:

- The Master of Public Health student develops the competencies needed to identify, assess, and manage environmental and occupational health problems.
- The Doctor of Public Health program prepares a practitioner to use approaches for recognizing and assessing environmental and occupational hazards and for developing programs designed to reduce risk and prevent injury and disease.

### EPIDEMIOLOGY AND BIOSTATISTICS (EPI/BIOS)

The Department of Epidemiology and Biostatistics serves as a source of expertise and training in the application of epidemiological and statistical methods for population-based research, and promotes improvements in population health through collaborations within Downstate Medical Center and with external stakeholders.

Students are prepared to critically examine and analyze population-based health data and advance biomedical research. We teach students to describe the scope of public health issues by giving them tools to quantify disease occurrence in the community in terms of demographics and time trends. Additionally, we teach students to identify the relative contributions of biological, behavioral, socio-economic, and environmental risk factors to disease incidence and clinical course.

We give students a toolbox of analytic approaches to help determine whether associations between risk factors and health outcomes are causal or coincidental. Determining causality is crucial to the development of prevention and treatment efforts.

Students and faculty actively collaborate with PhD researchers and clinicians across Downstate Medical Center, Brooklyn and NYC, the US, and around the world. Students learn to design, conduct, analyze, and interpret studies to identify and ameliorate demographic and socioeconomic inequities in health and illness in New York City and beyond.

#### Unique features:

Our small class sizes allow for individual attention to students and more rigorous assignments.

- We focus on the analysis of heath inequities experienced by underserved communities locally in Brooklyn and NYC, as well as nationally and internationally.
- Courses in statistical software (SAS, SPSS, R), applied statistical methods, and clinical trials provide students with in-demand biomedical research skills.
   Faculty also develop new biostatistical methods for applied public health research.
- Students can participate in the mapping of the New York City microbiome and ongoing urban bio-surveillance in our Infectious Disease Epidemiology course.
- Other fieldwork experiences allow students to see the work of experienced epidemiologists and biostatisticians first-hand, both locally and in international settings.
- Students can gain invaluable experience analyzing public health data sources, presenting their research at local and national conferences, and publishing their findings.

# HEALTH POLICY AND MANAGEMENT (HPMG)

Health Policy and Management prepares leaders who will understand, guide, and improve public health and healthcare systems. Health Policy requires the ability to assess, collaborate, plan, innovate, and advocate for improvement in the public health and healthcare systems. Health Management requires the ability to lead a public health organization or healthcare system ethically with financial, operational, and scientific expertise.

### **Unique features:**

Faculty members and students actively participate in the study and improvement of the public health and healthcare systems through work with healthcare institutions, community organizations, public health departments, educational institutions, and public advocacy. Some examples of student projects follow:

- Collection and analysis of data to help prevent hospital readmissions for congestive heart failure
- Engagement of Chinese-American cancer survivors with the services of the American Cancer Society
- Analysis of organizational factors and quality of obstetrical care in Egypt
- Analysis of factors for successful recruitment of under-represented minorities into health professions
- Survey of high school-medical education 'pathways' for the underprivileged
- Examination of developments in food safety policy
- Assessment of oral health care in older adults with dementia
- Study of obesity trends in America
- Examination of the effectiveness of maternity waiting homes in developing countries
- Review of the current state of mental health treatment within the New York City justice system
- Analysis of the factors driving overuse of the American health care system by 'super-utilizers'
- Exploration of the factors perpetuating violence against women in countries around the world

# **The Center for Global Health**

The Center for Global Health was established in February 2011. The center was established in recognition of the global nature of health promotion, disease prevention, and the influences on urban and immigrant health in Brooklyn. The center seeks to address health equity locally through global preventive strategies and internationally as well.

The center is in a unique position to achieve these goals given its faculty resources and experiential backgrounds, and the nature of the population of Brooklyn. Some 40 percent of Brooklyn's population was born outside of the United States. The linkages between many immigrants in Brooklyn and their countries of origin are often strong. Given these facts, the focus of the School of Public Health on urban and immigrant health is informed by the global and transnational nature of many of the morbidities affecting people living in Brooklyn.

Dr. Pascal James Imperato, Founding Dean of the School of Public Health, who is an internationally respected leader in global health, directed the center from 2011 until 2016. Dr. M. Monica Sweeney, Vice Dean for Global Engagement, and Chair of the Department of Health Policy and Management, became Director of the center in January 2016.

The Center for Global Health oversees a number of educational and service activities. These include:

#### The Global Health in Developing Countries Elective for Fourth Year Medical Students

This elective, which has been in place since the 1980s, provides fourth year medical students with an opportunity to observe, study, and participate in public health programs in resource poor countries. It also provides students with an opportunity to study health and health care disparities in such countries, to be of service to disadvantaged populations in these countries, and to have a cross-cultural experience. Through 2016, some 400 fourth year medical students have participated in this elective in 41 countries. All student participants have been provided with financial stipends that cover travel and ancillary costs. These stipends have come from the Alumni Fund of the College of Medicine, the LSK Foundation, the Dr. Michael and Lona B. Kennéy Fund, and the Dr. Joshua H. Weiner Fund. Dr. Denise M. Bruno, Assistant Professor of Community Health Sciences, currently serves as the Course Director.

#### The Global Practical Field Experience

This program permits MPH and DrPH degree students to perform their required field experience overseas. Students have participated in this experience in South Africa, Trinidad, and Haiti. All student expenses are covered from a special fund in the Health Science Center Foundation at Brooklyn established by Dr. Michael Szarek, Chair of the Department of Epidemiology and Biostatistics.

# **Admissions Requirements**

Master of Public Health MD/Master of Public Health Advanced Certificate in Public Health Doctor of Public Health

The School of Public Health (SPH) offers several programs leading to the Master of Public Health as well as a Doctor of Public Health Program. SPH also offers an Advanced Certificate in Public Health program and accepts non-matriculated students.

Admission requirements for the Master of Public Health are provided below. Requirements for the MD/MPH, and the Advanced Certificate in Public Health may differ from the primary Master of Public Health program.

Prospective students should check the website for the most current admissions information. Students should also review the specific admissions requirements for the program to which they are applying, since admissions requirements may vary by program.

#### MASTER OF PUBLIC HEALTH

#### **Application Deadlines:**

Summer Semester - February 15th Fall Semester - May 31st

#### **Admission Policy**

The time allotted for completion of the MPH degree, regardless of concurrent degree involvement, is six (6) years unless there are compelling extenuating circumstances.

#### **Admission Requirements**

At the time of application, unofficial documents maybe submitted via the ApplyYourself application system. Upon acceptance, however, all students will be required to submit all final and official documents before matriculating.

#### Requirements:

- Baccalaureate degree from a Council for Higher Education (CHEA) regionally accredited college or university.
- Official transcripts from all previous postsecondary CHEA regionally accredited colleges or universities. If the student is applying for concurrent degrees
  in the College of Medicine, College of Nursing, or College of Health Related Professions, then transcripts need only be sent to those primary programs.

- An undergraduate record with a cumulative grade point average of 3.0 or better (on a 4.0 scale) is preferred. Applicants who have completed all or part of their education abroad are required to have a course-by-course educational credential evaluation completed by an approved agency accredited by the National Association Of Credential Evaluation Services (http://www.naces.org).
- For those interested in pursuing a concentration in Biostatistics, Epidemiology, or Environmental and Occupational Health Sciences, a Bachelor of Science degree is preferred with at least one (1) undergraduate math and one (1) undergraduate biology course. For applicants to Environmental and Occupational Health Sciences, an undergraduate chemistry course is preferred.
- Appropriate completion of the MPH Program application, including the personal statement and essay on a selected public health topic. Please see
  information below in regard to the personal statement and essay (*Written Essays Guidelines*).

#### Letters of Recommendation

For students pursuing only the MPH degree: Two (2) letters of recommendation must be submitted addressing the applicant's academic ability and professional experience or interest as it applies to public health issues.

#### **Graduate Entrance Examinations**

A graduate entrance examination is required.\*\* The graduate entrance examination must have been taken within five (5) years of the application submission date. Graduate entrance examinations that will be accepted include the following:

- Graduate Record Examinations (GRE).
- Medical College Admissions test (MCAT).
- Dental Admission Test (DAT).
- Graduate Management Admission Test (GMAT).
- Law School Admission Test (LSAT).
- Optometry Admission Test (OAT).
- United States Medical Licensure Exam (USMLE) Step 1 or 2.
- National Board of Veterinary Medical Exam (NBVME).

\*\*The graduate entrance examination may be waived for those who have completed the Advanced Certificate in Public Health Program at SUNY Downstate with a GPA of 3.0 or above.

\*\*If an applicant has earned a doctoral degree from a CHEA regionally accredited college or university, the graduate entrance examination may be waived at the discretion of the departmental chair after review of official transcripts from said school.

#### **Proof of Licensure**

Proof of current licensure must be submitted for all licensed health professionals.

#### Test of English as a Foreign Language (TOEFL)

The TOEFL is required for ALL applicants for whom English is a Second Language and who have not completed at least one year of full-time study in a regionally accredited college or university in the United States (at least 24 semester credits, including two courses in English composition). A minimum score for the paper exam of 536 (undergraduate programs) and 564 (graduate programs); a minimum score for the computer exam of 208 (undergraduate

programs) and 223 (graduate programs); and a minimum score for the Internet-based exam of 65-78 (undergraduate programs) and 79-95 (graduate programs) is required on the TOEFL.

TOEFL Box 6151, Princeton, New Jersey 08541 phone: (609) 771-7100 web: <u>www.toefl.org</u> » Use the SUNY Downstate Institutional Code of 2534

» Please note: Your application is not considered complete without the required standardized test score(s).

#### **Application Fee**

A \$75 non-refundable application fee made payable to SUNY Downstate Medical Center.

#### Written Essay Guidelines

The application must include two written essays prepared by the applicant without outside assistance. These statements help the Admissions Committee evaluate the applicant's motivation for entering the program as well as skills in problem-solving, writing, and following guidelines. Each should be thoughtful, clear, concise, and well-organized. Any application that includes plagiarized material will be automatically rejected.

Personal Statement. The first essay is a personal statement in which the applicant explains his or her reasons for pursuing the degree in a particular area of interest and hopes for what he or she will achieve with that degree. The essay should be on separate, numbered sheets of paper and include the applicant's name at the top of each sheet. The essay should be no more than 500 words.

Public Health Essay. Choose and describe a public health issue/problem in which you have an interest and present at least one possible approach to addressing that issue/problem. The essay should be no more than 750 words.

In your essay please carefully describe the issue or situation, using and citing current references, to substantiate your arguments. Then present your thoughts on how you might go about addressing some aspect of it. Please note that you can present a solution wherein you might work as an individual, or with other people or organizations. The essay should be clearly written and carefully checked for grammar and spelling. **Please use separate sheets of paper for your essay, number the pages, and make certain that you include your name on each sheet.** 

#### Admission to the Concurrent Degree Program

Applicants for concurrent degrees with other programs in the medical center must apply to and be accepted by each program. Students applying for concurrent degrees should apply to both programs as early as possible so that they can obtain their admission status for each program in a timely fashion. The admission requirements for each degree apply. Students applying for concurrent degrees should indicate their intent on the application.

#### Admission to the Master of Public Health Program After Successful Completion of the SUNY Downstate Advanced Certificate Program

Students who have successfully completed the SUNY Downstate Advanced Certificate Program with a grade point average of 3.0 or greater may apply into the Master of Public Health Program by submitting the following documents only:

- ACPH to MPH Transition form.
- Advanced Certificate students who submit an application into the MPH program while enrolled in their final semester and meet the requirements listed above, will be accepted on the condition that their final cumulative grade point average is 3.0 or greater.

No other supporting documents are required.

#### **Application Deadlines**

MPH applicants can apply for either summer or fall semester except for MD/MPH applicants (see below). Applicants intending to enter in the **Summer** semester must have their applications completed and submitted by **February 15th**. Applicants intending to enter in the **Fall semester** must have their applications completed and submitted by **April 31st** of the academic year beginning in September. Note that applicants may be admitted after these dates, but only on space-available basis.

For MD/MPH Applicants: Matriculated MD/MPH applicants can enter <u>only</u> during the summer semester. The deadline for declaring an interest in the MD/MPH program is May 1st to the SUNY Downstate Office of Admissions.

#### **Transfer Credits**

A maximum of twelve (12) credits from another CEPH and CHEA regionally accredited college and/or university can be transferred into the MPH program. Transfer of credits for courses used towards the completion of a granted degree will not be considered.

Courses taken outside of SUNY Downstate's School of Public Health while actively matriculated in the program will not be considered.

For transfer of credits, the accepted student must provide: 1) a detailed course syllabus and 2) an official transcript verifying at least a B grade (3.0 on a 4.0 system) in that particular course(s).

If the student fails to provide appropriate proof of course content equivalency and an official transcript in a timely fashion, the option for credit transfer may be denied.

#### **Notification of Status**

Notification of action on the application is mailed after the complete admission materials are received and reviewed by the SPH Committee on Admission. The application review cycle begins in January of each year. A student accepted for admission into one of the graduate programs is required to secure his or her place in the class by submitting a deposit that will be applied to the first semester's tuition.

#### Deferrals

If accepted, individuals may request a deferral for up to one year for personal or professional reasons. Requests must be made in writing and submitted to the Office of Admissions and to the Chair of the specific department. No extensions beyond the one-year are permitted.

#### **Matriculation Policy**

Accepted students are required to submit all required documents, including final transcripts for all college and universities attended, to the Office of Admissions prior to the start of classes. Note that required health documents must be submitted directly to the Student Health Office.

#### Mandatory Criminal Background Check

Please note that all students who attend SUNY Downstate Medical Center will be required to complete a background check prior to enrollment, at your expense. Background checks will be conducted post-admission and are not used by the Admissions Committee to determine admissibility.

#### **Re-applicants**

Some "re-applicants" are admitted each year with improved credentials. Re-applicants should contact the Program Office to schedule a pre-application advisement appointment to discuss how to improve their credentials in a reapplication. Re-applicants must submit a new application form, application fee, transcripts, and at least one new letter of recommendation.

#### International Student Applications and Foreign Medical Graduates

Applicants who have completed all or part of their education abroad are required to have a course-by-course educational credential evaluation completed by an approved agency accredited by **The National Association Of Credential Evaluation Services** (<u>http://www.naces.org</u>). This evaluation must include a breakdown of each course by name, US equivalent semester hours, and the corresponding letter grade. These requests should be done and completed <u>well</u> <u>in advance</u> of the semester deadlines.

International students should not consider assistance from the college in their financial planning. On-campus employment is not recommended because of the demanding nature of the academic program. Many international students have visa restrictions on working. All international applicants must document their ability to finance their education as part of the admissions process.

International Medical Graduates who wish to be considered health care professionals are required to either have a valid and current state license in the United States or have passed Steps I and II of the United States Medical Licensing Examination (USMLE) before they can be considered for entry into the program.

#### **Application Processing**

All applicants are instructed to submit the application for admission and all official supporting credentials via the ApplyYourself application system. When an application is complete, that application is forwarded to the School of Public Health for review by the Committee on Admissions.

#### Important Information

Admission to SUNY Downstate Medical Center is based on the qualifications of the applicant. SUNY Downstate Medical Center does not discriminate on the basis of race, sex, color, creed, age, national origin, disability, sexual orientation, religion, marital status, or status as a disabled veteran in the Vietnam era. Responses on this application to questions of race, sex, and date of birth are voluntary and are used for statistical purposes only.

#### For more information about the School of Public Health, contact:

The SUNY Downstate Medical Center School of Public Health MSC 43 450 Clarkson Avenue Brooklyn, NY 11203 718-270-1065 (telephone) 718-270-2533 (fax) E-mail: <u>PublicHealth@downstate.edu</u>

#### All application materials for all programs must be submitted to:

SUNY Downstate Medical Center Office of Admissions Box 60 450 Clarkson Avenue Brooklyn, NY 11203 Tel: 718-270-2446

#### Contact information for GRE, and TOEFL examinations is:

Graduate Record Examination Educational Testing Service Box 955 Princeton, NJ 08540 609-921-9000 E-mail: gre\_info@ets.org Website: http://www.gre.org **GRE code: 2534** TOEFL Box 6151 Princeton, NJ 08451 609-771-7100 Website: http://www.toefl.org **TOEFL code: 2534** 

#### MD / MASTER OF PUBLIC HEALTH

#### Application Deadlines:

Summer Semester - May 1st

The following application procedures pertain <u>only</u> to those applicants who are also applicants to the SUNY Downstate College of Medicine in this application year, <u>and</u> who are also applying to the concurrent MPH degree program.

<u>NOTE</u>: Applicants must be accepted by the College of Medicine and the School of Public Health Admissions Committees. Admissions policies of both colleges pertain to MD/MPH applicants.

#### AMCAS Application Tip:

If you are applying to the MD/MPH program, you should select **Combined Medical Degree – Graduate** as your program type. If you decide to change from MD/MPH to **regular MD only** after you have submitted your AMCAS application, you need to log into your AMCAS application and submit a **Post Submission Change – change Program type** via AMCAS and select **Regular MD** as your program type.

If you already have the MD degree, or if you plan to attend the MPH program not as a concurrent degree program, you should follow the application policies and procedures for the Master of Public Health (MPH) Admissions Requirements.

#### Admission to the MD/MPH Degree Program

Applicants who wish to apply to the MD/MPH program must log into their AMCAS application and change their program type to Combined Medical Degree/Graduate. Applicants will not be required to complete a supplemental application for the MPH program.

#### Admissions Policies

Applicants to the MD/MPH program must meet the admissions requirements of both programs (MD and MPH). Please review the information from the College of Medicine admissions policies section.

In addition, an undergraduate record with a cumulative grade point average of 3.0 or better (on a 4.0 scale) and a Medical College Admissions Test (MCAT) score of 24 or above are preferred is preferred.

For those interested in pursuing a concentration in Biostatistics, Epidemiology, or Environmental and Occupational Health Sciences, a Bachelor of Science degree is preferred with at least one (1) undergraduate math and one (1) undergraduate biology course. For applicants to Environmental and Occupational Health Sciences, an undergraduate chemistry course is preferred.

#### **Application Procedures**

- Applicants must complete an AMCAS application indicating "Combined Medical Degree/Graduate" as application type.
- Applicants to the MD/MPH program will not be required to pay a SPH application fee nor complete a supplemental application.
- The deadline to complete an AMCAS application is December 1st.
- The deadline for declaring an interest in the MD/MPH program is May 1st.
  - Applicants who later wish to be considered for admission to the MD/MPH program after December 1st, must send an email notification to medadmissions@downstate.edu declaring their intent.

- Applicants will have two days to log back into their AMCAS application to change their program type to Combined Medical Degree/Graduate.
- A copy of the applicant's updated AMCAS application and letters of recommendation will be forwarded to the School of Public Health.

Once the MD/MPH AMCAS application is complete, the application and letters of recommendations will then be forwarded to the School of Public Health electronically.

NOTE: All letters must be submitted electronically—through the AMCAS letter service (including Virtual Evals or Interfolio). We do not accept letters of recommendation sent by mail, email, or fax.

#### **MD/MPH Acceptance:**

- An acceptance reply form will be required within two weeks of the mailing of the decision letter.
- Applicants will be required to submit a deposit between May 1 15 for both the MD (\$100) and SPH (\$150) to secure their place in the entering class for both schools.

#### ADVANCED CERTIFICATE IN PUBLIC HEALTH

Application Deadlines: Summer Semester - February 15th

Fall Semester - May 31st

#### Admission Requirements

A number of factors – undergraduate and graduate Grade Point Average (GPA), letters of recommendation, and personal experiences – are considered in the decision to accept an applicant into the Advanced Certificate in Public Health Program. Each factor is weighed separately yet considered in relation to the others in the decision to admit or reject an applicant.

#### Requirements:

- Appropriate completion of the Advanced Certificate in Public Health Program admission application.
- Baccalaureate degree from a Council for Higher Education (CHEA) regionally accredited college or university.
- Official transcripts from all previous postsecondary CHEA regionally accredited colleges or universities. If the student is applying for concurrent degrees in the College of Medicine, College of Nursing, or College of Health Related Professions, then transcripts need only be sent to those primary programs.
- An undergraduate record with a cumulative grade point average of 2.5 or better (on a 4.0 scale) is preferred. Applicants who have completed all or part
  of their education abroad, are required to have a course-by-course educational credential evaluation completed by an approved agency accredited by
  the National Association Of Credential Evaluation Services (<u>http://www.naces.org</u>).

#### Personal Statement

The essay is a personal statement in which the applicant explains his or her reasons for pursuing the advanced certificate in public health and hopes for what he or she will achieve with that degree. The essay should be on separate, numbered sheets of paper for and include the applicant's name at the top of each sheet. The essay should be no more than 500 words.

#### Letters of Recommendation

One (1) letter of recommendation must be submitted addressing the applicant's academic ability and professional experience or interest as it applies to public health issues. A Letter from a professor or work-related supervisor is preferred. Note that letters from friends and family members are not acceptable.

#### CV/Resume

A CV/Resume or a brief biographical sketch should be submitted.

#### **Proof of Licensure**

Proof of current licensure must be submitted for all licensed health professionals

#### TOEFL

The (TOEFL) is required for ALL applicants for whom English is a Second Language and who have not completed at least one year of full-time study in a regionally accredited college or university in the United States (at least 24 semester credits, including two courses in English composition). A minimum score for the paper exam of 536 (undergraduate programs) and 564 (graduate programs); a minimum score for the computer exam of 208 (undergraduate programs) and 223 (graduate programs; and a minimum score for the Internet-based exam of 65-78 (undergraduate programs) and 79-95 (graduate programs) is required on the TOEFL.

TOEFL Box 6151, Princeton, New Jersey 08541 phone: (609) 771-7100 web: <u>www.toefl.org</u> Use the SUNY Downstate Institutional Code of 2534

#### **Application Fee**

A \$50 non-refundable application fee made payable to SUNY Downstate Medical Center.

At the time of application, unofficial documents maybe submitted via the ApplyYourself application system. Upon acceptance, however, all students will be required to submit all final and official documents before matriculating.

#### Advanced Certificate in Public Health Course Requirements:

Accepted students must complete five (5) MPH core courses (listed below).

#### **MPH Core Courses**

- Principles of Biostatistics
- Principles of Epidemiology
- Health Behavior and Risk Reduction
- Issues in Environmental Health
- Introduction to Health Policy and Management

#### **Transfer Credits**

Students enrolled in the Advanced Certificate program must complete all degree requirements at the SUNY Downstate School of Public Health and may not transfer credits from outside institutions.

#### Procedures of Committee on Admissions

- The committee receives the original application, when completed, from the SUNY DMC Admissions Office.
- The committee appoints one primary and one secondary reviewer for each application. Each reviewer is responsible for assessing each candidate's
  application based on standard criteria.
- At a regularly scheduled meeting of the Admissions Committee the primary and secondary reviewers' present their reports. The Admissions Committee discusses each candidate and then votes upon his/her qualifications for admission: accept, reject, or hold for additional information. The report is then sent to the Dean. The application, with the Committee's decision is copied and the original returned to the Office of Student Admissions.
- The Committee notes the decision in the file and it is also documented in a memo that accompanies the returned files.
- The SUNY Downstate Medical Center Director of Admissions issues a letter to the applicant noting the decision regarding acceptance, rejection or hold for additional information.
- Copies of all correspondence are maintained in each applicant's file in the SPH Office of Student Affairs for a period of 3 years.

## DOCTOR OF PUBLIC HEALTH

#### Application Deadlines:

#### Fall Semester - May 31st

The time allotted for completion of the Doctor of Public Health degree, regardless of concurrent degree involvement is eight (8) years unless there are compelling extenuating circumstances.

#### Admission Requirements:

- Graduate Degree. Prior Master's degree from a CHEA regionally accredited college and/or university.
  - Such Master's degrees may include MPH, MSW, MBA, MHS, or another relevant Master's degree.
  - The applicant may also be required to take additional coursework to meet the requirements of the core MPH curriculum in the chosen area of study. Please note that coursework completed to meet this requirement may not be used to satisfy doctoral coursework requirements unless such courses are at the doctoral level. Such decisions are made on an individual basis by each department.
  - If additional course work is required, then the applicant may be given a conditional acceptance to the doctoral program until the conditional requirements are satisfied.
- Transcripts. Official transcripts from all previous postsecondary CHEA regionally accredited colleges or universities.
- Grade Point Average (GPA). A graduate (e.g. MPH, MS, MA, etc...) academic record with a cumulative grade point average of 3.5 or better (on a 4.0 scale) in the major course of study is preferred.
- Appropriate completion of the doctoral application.

- Personal Statement. An essay of 1000 words or less denoting the applicant's interest in pursuing a doctoral degree in a specific area. The applicant should examine the research and practice interests of the doctoral faculty in his/her respective areas of interest to ensure that an appropriate faculty collaboration is possible. Please see the SPH Faculty Webpage to learn more about the respective faculty.
- Letters of Recommendation. Three (3) letters of recommendation preferably from either faculty in the primary field of study and/or from a recent employer
- Entrance Examinations. A graduate entrance examination is required. The graduate entrance examination must have been taken within five (5) years of the application submission date. Graduate entrance examinations that will be accepted include the following :
  - Graduate Record Examinations (GRE).
  - Medical College Admissions test (MCAT).
  - Dental Admission Test (DAT).
  - Graduate Management Admission Test (GMAT).
  - Law School Admission Test (LSAT).
  - Optometry Admission Test (OAT).
  - United States Medical Licensure Exam (USMLE) Step 1 or 2.
  - National Board of Veterinary Medical Exam (NBVME).
- On-site Interview. Each doctoral applicant must have an on-site interview with a designated faculty member in the department to which the applicant is applying. The interview will be arranged by the specific department when the applicant's application is complete. The detailed written report and recommendation of the interviewer will be submitted with the application for consideration by the Admissions Committee,
- Licensure. Proof of current licensure must be submitted for all licensed health professionals
- Test of English as a Foreign Language. The (TOEFL) is required for ALL applicants for whom English is a Second Language and who have not completed at least one year of full-time study in a regionally accredited college or university in the United States (at least 24 semester credits, including two courses in English composition). A minimum score for the paper exam of 536 (undergraduate programs) and 564 (graduate programs); a minimum score for the computer exam of 208 (undergraduate programs) and 223 (graduate programs; and a minimum score for the Internet-based exam of 65-78 (undergraduate programs) and 79-95 (graduate programs) is required on the TOEFL.

TOEFL Box 6151 Princeton, New Jersey 08541 phone: (609) 771-7100 web: www.toefl.org

Use the SUNY Downstate Institutional Code of 2534 Please note: Your application is not considered complete without the required standardized test score(s).

Application Fee. A \$75 non-refundable application fee made payable to SUNY Downstate Medical Center.

• For those applying to Biostatistics, Epidemiology, or Environmental and Occupational Health Sciences, a Bachelor of Science degree is preferred with at least one (1) undergraduate math and one (1) undergraduate biology course. For applicants to Environmental and Occupational Health Sciences, an undergraduate chemistry course is also preferred.

At the time of application, unofficial documents maybe submitted via the ApplyYourself application system. Upon acceptance, however, all students will be required to submit all final and official documents before matriculating.

#### **Application Deadlines**

Applicants intending to enter in the Fall semester must have their application completed and submitted by May 31st. Note that applicants may be admitted after this date, but only on space-available basis.

#### **Transfer Credits**

A maximum number fifteen (15) credits from another CEPH and CHEA regionally accredited college and/or university can be transferred into the doctoral program. Courses used towards the completion of a granted degree will not be considered. However, some DrPH coursework may be waived if relevant doctoral level courses have been taken at another institution. Courses taken outside of SUNY Downstate's School of Public Health while actively matriculated in the program will not be considered.

For transfer of credits or a waiver, the accepted student must provide: 1) a detailed course syllabus and 2) an official transcript verifying at least a B grade (3.0 on a 4.0 system) in that particular course(s).

If the student fails to provide appropriate proof of course content equivalency and an official transcript in a timely fashion, the option for credit transfer may be denied.

#### **Notification of Status**

Notification of action on the application is mailed after the complete admission materials are received and reviewed by the SPH Committee on Admission. The application review cycle begins in January of each year. A student accepted for admission into one of the graduate programs is required to secure his or her place in the class by submitting a deposit that will be applied to the first semester's tuition.

#### **Matriculation Policy**

Accepted students are required to submit all required documents, including final transcripts for all college and universities attended, to the Office of Admissions prior to the start of classes. Note that required health documents must be submitted directly to the Student Health Office.

#### Mandatory Criminal Background Check

Please note that all students who attend SUNY Downstate Medical Center will be required to complete a background check prior to enrollment, at your expense. Background Checks will be conducted post-admission and are not used by the Admissions Committee to determine admissibility. Once you are accepted, you should complete the criminal background check by following the instructions <u>here</u>.

#### International Student Applications and Foreign Medical Graduates

Applicants who have completed all or part of their education abroad, are required to have a course-by-course educational credential evaluation completed by an approved agency accredited by The National Association Of Credential Evaluation Services (http://www.naces.org). This evaluation must include a breakdown of each course by name, US equivalent semester hours, and the corresponding letter grade. These requests should be done and completed well in advance of the semester deadlines.

Our entering classes are small and admission preference is given to New York State residents and to individuals who have completed their prerequisite courses in the United States.

International students should not consider assistance from the college in their financial planning. On-campus employment is not recommended because of the demanding nature of the academic program. Many international students have visa restrictions on working. All international applicants must document their ability to finance their education as part of the admissions process.

International Medical Graduates who wish to be considered health care professionals are required to either have a valid and current state license in the United States or have passed Steps I and II of the United States Medical Licensing Examination (USMLE) before they can be considered for entry into the program.

#### Deferrals

If accepted, individuals may request a deferral for up to one year for personal or professional reasons. Requests must be made in writing and submitted to the Office of Admissions and to the Chair of the specific department. No extensions beyond the one-year are permitted.

#### **Re-applicants**

Some "re-applicants" are admitted each year with improved credentials. Re-applicants should contact the Program Office to schedule a pre-application advisement appointment to discuss how to improve their credentials in a reapplication. Re-applicants must submit a new application form, application fee, transcripts, and at least one new letter of recommendation.

#### **Application Processing**

All applicants are instructed to submit the application for admission and all official supporting credentials via the ApplyYourself application system. When an application is complete, that application is forwarded to the School of Public Health for review by the Committee on Admissions.

#### Important Information

Admission to SUNY Downstate Medical Center is based on the qualifications of the applicant. SUNY Downstate Medical Center does not discriminate on the basis of race, sex, color, creed, age, national origin, disability, sexual orientation, religion, marital status or status as a disabled veteran in the Vietnam era. Responses on this application to questions of race, sex, and date of birth are voluntary and are used for statistical purposes only.

# MPH / ADVANCED CERTIFICATE Academic Requirements

#### Master of Public Health

The Master of Public Health Program (MPH) is currently offered as a part-time or full-time program.

MPH degree candidates must complete the School of Public Health core requirements as well as the Concentration requirements. The number of credits required for successful completion of the degree is 42.

All students must complete a Culminating Experience that integrates theory and practice. The SUNY Downstate Medical Center School of Public Health is well situated to offer potential students a broad range of Culminating Experiences through collaborative arrangements with an array of public and private hospitals, community-based organizations, and local, state, and federal agencies.

#### **MPH Core Requirements**

All students for an MPH must complete:

- fifteen (15) credits of core course requirements, which provide the basic knowledge in major areas of public health,
- twelve (12) credits of concentration course requirements in their major area,
- twelve (12) credits of course electives,
- one (1) credit field experience,
- two (2) credits of the Culminating Experience.

#### Requirements

| Course Number | Course Title                                 | Credits |
|---------------|--|---------|
| BIOS 5200     | Principles of Biostatistics                  | 3       |
| CHSC 5200     | Health Behavior and Risk Reduction           | 3       |
| EOHS 5200     | Issues in Environmental Health               | 3       |
| EPID 5200     | Principles of Epidemiology                   | 3       |
| HPMG 5206     | Introduction to Health Policy and Management | 3       |
|               |  | Total   |
|               |  | 15      |

#### **Concentration Options:**

- 1. Biostatistics
- 2. Community Health Sciences Urban And Immigrant Health
- 3. Environmental & Occupational Health Sciences
- 4. Epidemiology
- 5. Health Policy And Management

#### MPH Degree with Concentration in:

#### **Biostatistics**

The primary objective of the MPH in Biostatistics is to provide a strong foundation in Public Health with a focus on quantitative methods. Students choosing this Concentration should have a strong aptitude for quantitative reasoning and methods with a focus on public health.

#### Requirements

#### **Biostatistics Concentration Core Requirements**

All students enrolled in the Biostatistics Concentration must complete the Concentration core requirements listed below.

| Course Number | Course Title                | Credits     | Pre-requisite Courses           |
|---------------|-----------------------------|-------------|---------------------------------|
| BIOS 5201     | Categorical Data Analysis   | 3           | BIOS 5200, EPID 5200, BIOS 5202 |
| BIOS 5202     | Applied Regression Analysis | 3           | BIOS 5200, EPID 5200            |
| BIOS 5203     | Survival Analysis           | 3           | BIOS 5200, EPID 5200, BIOS 5202 |
| BIOS 5204     | Statistical Computing       | 3           | BIOS 5200, EPID 5200            |
|               |                             | Total<br>12 |                                 |

#### **Biostatistics Concentration Electives**

| Course Number | Course Title             | Credits | Pre-requisite Courses |
|---------------|--------------------------|---------|-----------------------|
| BIOS 5300     | Introduction to Sampling | 3       | BIOS 5200, EPID 5200  |

| BIOS 5301 | Survey Research Methods                   | 3 | BIOS 5200, EPID 5200, BIOS 5201, BIOS 5204,<br>EPID 5201            |
|-----------|---|---|---|
| BIOS 5302 | Advanced Experimental Design              | 3 | BIOS 5200, EPID 5200, BIOS 5201, BIOS 5202,<br>BIOS 5204, EPID 5201 |
| BIOS 5303 | Nonparametric Statistics                  | 3 | BIOS 5200, EPID 5200, BIOS 5201, BIOS 5202,<br>BIOS 5204, EPID 5201 |
| BIOS 5304 | Design and Analysis of Clinical<br>Trials | 3 | BIOS 5200   |

#### **Community Health Sciences**

This program provides students with the knowledge and skills needed to identify major behavioral, social, and cultural factors that impact the health of resident and immigrant individuals, their families, and their communities in urban settings. Students will work collaboratively on developing goals and strategies for modifying those factors, and on designing assessments to determine the effect of these efforts. A focus of training involves gaining an understanding of and skills needed to address issues that disproportionately impact urban and immigrant populations. Course and fieldwork target theory and methods for designing, implementing, and evaluating programs aimed at reducing the burden of major health problems.

#### Requirements

#### Community Health Sciences - Urban and Immigrant Health Concentration Core Requirements

All students enrolled in the Urban and Immigrant Health Concentration must complete the Concentration core requirements listed below.

| Course Number | Course Title                                  | Credits     | Pre-requisite Courses |
|---------------|---|-------------|-----------------------|
| CHSC 5202     | Issues in the Health of Immigrant Populations | 3           |                       |
| CHSC 5203     | Sex, Gender, Race, and Ethnicity              | 3           |                       |
| CHSC 5205     | Urban Health Issues                           | 3           |                       |
| CHSC 5206     | Planning, Program, and Evaluation             | 3           | CHSC 5200             |
|               |   | Total<br>12 |                       |
|               |   |             |                       |

### Community Health Sciences - Urban and Immigrant Health Concentration Electives

| Course Number | Course Title  | Credits | Pre-requisite Courses           |
|---------------|---|---------|---------------------------------|
| PUBH 5200     | Introduction to Public Health                             | 3       |                                 |
| CHSC 5204     | Community Organization                                    | 3       |                                 |
| CHSC 5300     | Introduction to Research                                  | 3       | BIOS 5200, EPID 5200            |
| CHSC 5301     | Human Sexual Behavior                                     | 3       |                                 |
| CHSC 5302     | Social Marketing  | 3       |                                 |
| CHSC 5303     | Issues in HIV Prevention                                  | 3       |                                 |
| CHSC 5304     | Planning Pediatric & Adolescent Intervention              | 3       |                                 |
| CHSC 5305     | Issues in Adolescent Health                               | 3       |                                 |
| CHSC 5306     | Psychosocial and Behavioral Epidemiology                  | 3       | BIOS 5200, EPID 5200, CHSC 5200 |
| CHSC 5307     | Early Child Development: A Public Health Perspective      | 3       |                                 |
| CHSC 5308     | Public Health Preparedness and Response to<br>Emergencies | 3       | CHSC 5200                       |
| CHSC 5309     | Introduction to Global Public Health                      | 3       |                                 |
| CHSC 5311     | Public Health Practice                                    | 3       |                                 |
| CHSC 5312     | Reading Seminar on the Social Determinants of Health      | 3       |                                 |
| CHSC 5313     | Public Health and Well-Being                              | 3       | CHSC 5200                       |
| CHSC 5314     | Centering Wellness  | 3       |                                 |

#### **Environmental & Occupational Health Sciences**

Environmental health science is concerned with the study of the adverse impacts of physical, chemical, and biological agents in the environment on human health. To characterize the interface between human health and the environment, it is necessary to utilize a set of tools and methods to quantify or categorize exposure. The goal of the Environmental Health Concentration of the MPH at SUNY Downstate is to introduce students to the basic tools and competencies to identify, assess, and manage environmental health problems.

#### Requirements

#### **Environmental & Occupational Health Concentration Core Requirements**

All students enrolled in the Environmental & Occupational Health Concentration must complete the Concentration core requirements listed below.

| Course Number | Course Title                               | Credits     | Pre-requisite Courses |
|---------------|--|-------------|-----------------------|
| EOHS 5201     | Introduction to Management, Policy and Law | 3           | EOHS 5200             |
| EOHS 5202     | Occupational Health                        | 3           |                       |
| EOHS 5203     | Built Environment & Public Health          | 3           |                       |
| EOHS 5205     | Public Health Aspects of Physical Trauma   | 3           |                       |
|               |  | Total<br>12 |                       |

#### **Environmental & Occupational Health Concentration Electives**

| Course Number | Course Title  | Credits | Pre-requisite Courses              |
|---------------|---|---------|------------------------------------|
| EOHS 5302     | Women's Health Policy: Epidemiology & the Environment | 3       | EOHS 5200                          |
| EOHS 5304     | Case Studies in Environmental Health                  | 3       | EOHS 5200                          |
| EOHS 5306     | Risk Assessment and Communication                     | 3       | EOHS 5200                          |
| EOHS 5307     | Occupational & Environmental Epidemiology             | 3       | EOHS 5200, BIOS 5200, EPID<br>5200 |
| EOHS 5308     | Environmental and Occupational Toxicology             | 3       |                                    |

| EOHS 5309 | Remote Sensing and Spatial Analysis              | 3 |  |
|-----------|--|---|--|
| EOHS 5311 | Geographic Information Systems for Global Health | 3 |  |

#### Epidemiology

This program will provide students with the knowledge and skills needed to carry out epidemiologic investigations of major public health issues affecting urban and immigrant populations. Didactic training and fieldwork emphasizes skill in the planning and implementation of epidemiologic study designs; the collection and analysis of data; the interpretation and presentation of findings and discussion of public health implications.

#### Requirements

#### **Epidemiology Concentration Core Requirements**

All students enrolled in the Epidemiology Concentration must complete the Concentration core requirements listed below.

| Course Number | Course Title                      | Credits     | Pre-requisite Courses           |
|---------------|-----------------------------------|-------------|---------------------------------|
| EPID 5201     | Epidemiologic Research Methods    | 3           | EPID 5200                       |
| EPID 5202     | Infectious Disease Epidemiology   | 3           | EPID 5200                       |
| EPID 5203     | Chronic Disease Epidemiology      | 3           | BIOS 5200, EPID 5200            |
| EPID 5205     | Epidemiologic Research Methods II | 3           | BIOS 5200, EPID 5200, EPID 5201 |
|               |                                   | Total<br>12 |                                 |

#### **Epidemiology Concentration Electives**

| Course Number | Course Title              | Credits | Pre-requisite Courses |
|---------------|---------------------------|---------|-----------------------|
| EPID 5300     | Cancer Epidemiology       | 3       | BIOS 5200, EPID 5200  |
| EPID 5301     | Reproductive Epidemiology | 3       | BIOS 5200, EPID 5200  |
| EPID 5302     | Epidemiology of HIV/AIDS  | 3       | BIOS 5200, EPID 5200  |

| EPID 5303 | Nutritional Epidemiology                            | 3 | BIOS 5200, EPID 5200                          |
|-----------|---|---|---|
| EPID 5305 | Epidemiology of Aging                               | 3 | BIOS 5200, EPID 5200                          |
| EPID 5307 | Critical Approaches to the Epidemiologic Literature | 3 | BIOS 5200, EPID 5200, EPID<br>5201, EPID 5205 |
| EPID 5308 | Reproductive and Perinatal Epidemiology             | 3 | BIOS 5200, EPID 5200                          |
| EPID 5311 | The Epidemiology of Emerging Infectious Diseases    | 3 | EPID 5200, EPID 5202                          |

#### **Health Policy and Management**

The goal of this Concentration is to prepare students to be leaders in the area of health policy and management. The over \$2 billion spent on health care in the United States requires serious and competent stewardship. It is imperative that those who will be managers of health institutions and organizations and those who will develop and implement policy changes understand how the system came to be; how it currently operates and functions; and the likely scenarios for change in the future and their implications. This Concentration seeks to produce individuals within the field of public health who can provide leadership in health care organizations and institutions; and who can plan and evaluate management and policy strategies for health organizations and institutions.

#### Requirements

#### Health Policy and Management Concentration Core Requirements

All students enrolled in the Health Policy and Management Concentration must complete the Concentration core requirements listed below.

| Course Number | Course Title                         | Credits | Pre-requisite Courses |
|---------------|--------------------------------------|---------|-----------------------|
| HPMG 5202     | Health Care Advocacy and Politics    | 3       | HPMG 5206             |
| HPMG 5203     | Health Management Concepts           | 3       | HPMG 5206             |
| HPMG 5204     | Access, Cost and Quality of Care     | 3       | HPMG 5206             |
| HPMG 5207     | Principles in Hospital<br>Management | 3       | HPMG 5206             |
|               |                                      | Total   |                       |
|               |                                      | 12      |                       |

# Health Policy and Management Concentration Electives

| Course Number | Course Title                                      | Credits | Pre-requisite Courses |
|---------------|---|---------|-----------------------|
| HPMG 5201     | Health Policy in the Delivery System              | 3       | HPMG 5206             |
| HPMG 5306     | Policy Studies in Urban and Immigrant Health      | 3       |                       |
| HPMG 5307     | Global Issues in Maternal and Child Health Policy | 3       | HPMG 5206             |
| HPMG 5308     | Public Health Law and Bioethics                   | 3       |                       |
| HPMG 5309     | Policy Issues in Mental Illness                   | 3       |                       |
| HPMG 5311     | International Healthcare Systems                  | 3       |                       |
|               |   |         |                       |

#### Field Experience:

| Course Number | Course Title     | Credits | Pre-requisite Courses |
|---------------|------------------|---------|-----------------------|
| PUBH 6500     | Field Experience | 1       | All Core Courses      |

#### PUBH 6500: Field Experience 1 credit

This course is an opportunity for students to apply the knowledge and skills learned in the classroom directly in a fieldwork experience. The student will work at an approved external site, typically a local or state health agency or a local organization under the supervision of a public health professional. If a student is able to do a placement only in his or her regular place of employment, the assignment must extend beyond or be something other than his or her regular work duties and allow application of knowledge and skills learned in the classroom.

#### **Culminating Experience:**

The Culminating Experience allows the student to demonstrate the ability to integrate knowledge and skills of the 5 core disciplines in a Final Project similar to some aspect of practice as a public health professional. The faculty uses the Culminating Experience to judge whether the student demonstrates mastery of the required MPH competencies.

#### All MPH students must complete a Culminating Experience within their chosen concentration.

#### Details

#### **Culminating Experience 2 credits**

| Course Number | Course Title  | Credits | Pre-requisite Courses                   |
|---------------|---|---------|---|
| BIOS 6001     | Culminating Experience in Biostatistics                                     | 2       | All Core and BIOS Concentration Courses |
| CHSC 6001     | Culminating Experience in Community Health Sciences                         | 2       | All Core and CHSC Concentration Courses |
| EOHS 6001     | Culminating Experience in Environmental and Occupational<br>Health Sciences | 2       | All Core and EOHS Concentration Courses |
| EPID 6001     | Culminating Experience in Epidemiology                                      | 2       | All Core and EPID Concentration Courses |
| HPMG 6001     | Culminating Experience in Health Policy and Management                      | 2       | All Core and HPMG Concentration Courses |

#### **MD/Master of Public Health**

#### About the Program

Medical students at SUNY Downstate can earn a Master of Public Health degree while at the same time they earn their MD degree. Some students choose to complete the MPH by taking summer courses starting before the first year of medical school. Others take a year off between the third and fourth year of medical school to complete the MPH. Either way, the MPH gives a physician the power to do more.

Our program focuses on the health of immigrant and urban populations. MD/MPH students receive priority for selection for the fourth year medical school elective, Health Care in Developing Countries. The student may choose to complete the MPH with an advising concentration in one of five core areas:

- Biostatistics
- Community Health Sciences
- Environmental and Occupational Health Sciences
- Epidemiology
- Health Policy and Management

#### **Frequently Asked Questions**

#### Won't MPH courses interfere with my medical studies?

We have organized the MPH courses so that they don't conflict with your medical studies. Many students find that the MPH courses give them an understanding of health and disease, so that their medical studies are easier and more relevant.

#### What about the extra cost of the MPH degree?

SUNY tuition is relatively low. The total cost of the MPH degree (42 credits) is the cost of 3 full time semesters at the rate shown on the following link: http://sls.downstate.edu/bursar/tuition\_fees.html. Scholarship aid and loans are available.

#### How many credit hours are required?

The 42 credits required for the MPH can be earned over three summers or in one year between the 3rd and 4th years of medical school.

#### What kinds of doctors usually have an MPH?

Leaders in community health, research, health policy, governmental agencies, and academic medicine often have an MPH.

#### How will an MPH help my medical career?

- It will:
  - Deepen your understanding of your patients and society.
- Prepare you for leadership positions.
- Train you to improve the health not just of individuals, but of entire communities.
- Help you compete for the residency of your choice.
- Enhance your earning power.

An MPH will also equip you to work in the broad public health arena so that you can improve the health of not just individuals, but also of communities and countries. In addition, you will learn to advocate for change in health care policies, help control today's epidemic diseases, pursue a career at key agencies such as the New York State Health Department, the Centers for Disease Control and Prevention, or the National Institutes of Health, and work in global health within a wide array of organizations.

What would my course schedule look like?

# **Option 1: The MPH in 3 Summers**

| Semester  | MPH  | Medical School                        |
|---|--|---------------------------------------|
| Summer before medical school                            | 5 core courses                                   | _                                     |
| Fall  | _  | First year medical school curriculum  |
| Spring  |  | Standard courses                      |
| Summer between 1st<br>and 2nd year of medical<br>school | 4-5 courses, including Field<br>Experience       | _                                     |
| Fall  | _  | Second year medical school curriculum |
| Summer between 2nd<br>and 3rd year of medical<br>school | 4-5 courses, including<br>Culminating Experience | _                                     |
| Subsequent two years                                    |  | Clinical rotations                    |

# Option 2: The MPH in 1 year

| Semester              | МРН            | Medical School                     |
|-----------------------|----------------|------------------------------------|
| First three years     |                | Standard medical school curriculum |
| Summer after 3rd year | 5 core courses | _                                  |

| Fall            | 3 to 5 courses                                   | _                          |
|-----------------|--|----------------------------|
| Spring          | 3 to 5 courses, including<br>Field Experience    | _                          |
| Summer          | 3 to 5 courses, including Culminating Experience | _                          |
| Fall and Spring | _  | 4th year of medical school |

#### How do I apply?

See the information in the Admissions section.

I'm not sure I want to do the full MPH degree, but some of the courses look very interesting. Am I allowed to take a course without enrolling for the MPH?

Yes, we encourage medical students to sample our courses. In the fall semester of medical school, you may choose one of two popular courses, both of which fit in well with the medical school curriculum:

- Introduction to Public Health Theory and Practice
- Issues in Immigrant Health

#### How can I learn more?

We are always happy to answer questions.

Telephone: (718) 270-1065

Fax: (718) 270-2533

Email: publichealth@downstate.edu

School of Public Health

SUNY Downstate Medical Center

450 Clarkson Avenue, MSC 43

Brooklyn, NY 11203

If you would like to correspond with a current MD/MPH, send your request to publichealth@downstate.edu.

If you are invited for an interview for the College of Medicine, and would like to meet with someone from the MPH Program during your visit, please notify the SUNY Downstate Office of Admissions, which schedules your interview. We will make arrangements with them to meet and talk with you.

#### Advanced Certificate in Public Health

The SUNY Downstate Advanced Certificate in Public Health is focused on providing students with the necessary public health knowledge and skills to address the emerging challenges related to population health. The program provides students with the basics of public health. As such, it can also facilitate workforce entry in a variety of local, state, and federal health agencies or community-based organizations.

The Advanced Certificate Program is also available to students enrolled in the SUNY Downstate College of Medicine, College of Health Related Professions, and the College of Nursing. Medical Residents and Fellows may also wish to obtain the Advanced Certificate in Public Health.

Those who wish to go on for the Master of Public Health (MPH) degree, may apply the fifteen credits of the Advanced Certificate to that degree. In order to do so, students must maintain a cumulative grade point average of 3.0 while in the certificate program.

#### Curriculum

The curriculum for the Advanced Certificate in Public Health Program will consist of the five core MPH courses totaling 15 credits. These five core courses are those currently required of the students matriculated in the MPH degree program. These courses also match those of other accredited schools of public health offering an advanced certificate in public health. These courses are as follows:

| Course Number | Course Title                                 | Credits |
|---------------|--|---------|
| BIOS 5200     | Principles of Biostatistics                  | 3       |
| CHSC 5200     | Health Behavior and Risk Reduction           | 3       |
| EOHS 5200     | Issues in Environmental Health               | 3       |
| EPID 5200     | Principles of Epidemiology                   | 3       |
| HPMG 5206     | Introduction to Health Policy and Management | 3       |
|               | Total:                                       | 15      |

# **MPH Course Descriptions**

#### **MPH Core Requirements**

All students for an MPH must complete fifteen (15) credits of core requirements, which provide the basic knowledge in major areas of public health. In addition to 15 core credits, all MPH students are required to complete a one (1) credit field experience, two (2) credits of the Culminating Experience, and twelve (12) credits of electives.

#### Required MPH Core Courses (15 credits)

# BIOS 5200: Principles of Biostatistics (3) ↓

Introduction to statistical methods in public health. The course will cover descriptive statistics, probability concepts, and estimation of parameters, hypothesis testing, simple linear regression, correlation, and analysis of attribute data.

## CHSC 5200: Health Behavior and Risk Reduction (3)

An introduction to the concepts, theories, and status of research in health promotion and disease prevention, with an emphasis on methods employed to modify group and individual health-related behaviors. This course examines methods of ascertaining health behaviors, the design and interpretation of behavioral intervention programs to modify behaviors, and current trends in the study of how lifestyle and preventive health practices impact on public health.

## EOHS 5200: Issues in Environmental Health (3)

Major environmental health issues. The course addresses public health issues in the management of water quality, wastewater, occupational health, trace elements, municipal and hazardous waste, vector control and air quality.

# EPID 5200: Principles of Epidemiology (3)

Epidemiology is the study of patterns of disease in human populations and the application of this study to the control of health problems. Epidemiology forms the backbone of public health. You will need to have a strong understanding of the basic principles of this discipline to be able to read and understand published public health literature. Epidemiology helps biomedical and public health researchers understand whether their findings are real or due to chance alone. This course will provide you with the basic epidemiologic tools needed to conduct population-based health research.

## HPMG 5206: Introduction to Health Policy and Management (3)

This course uses a multi-disciplinary approach to policy and management in both the healthcare and the public health systems. Students will learn the organization, financing, and delivery of services within these systems as well as their legal and ethical bases. Students will also develop skills in program planning, development, budgeting, and evaluation; in strategic planning; in ensuring community health safety and preparedness; and in quality improvement initiatives. A central theme of the course is the accessibility and outcomes of care for urban and immigrant populations.

# BIOS 5201: Categorical Data Analysis (3)

This course covers analytical techniques involved in the analysis of studies where subjects have been cross-classified by two or more categorical variables. Special emphasis will be on problems related to epidemiology, public health, and medicine. Topics will include: significance versus magnitude of association; estimation of relative risk; matching cases and controls; effects,

measurement, and control of misclassification errors; combining evidence from many studies; and logistic regression. Students will be introduced to the SPSS statistical package for the topics covered in the course.

Prerequisite: BIOS 5200, EPID 5200, BIOS 5202

## BIOS 5202: Applied Regression Analysis (3)

Overview of common regression models used for biostatistical analysis; model choice, interpretation of output; discussion of common pitfalls.

Prerequisites: BIOS 5200, EPID 5200

## BIOS 5203: Survival Analysis (3)

This course covers the basic theoretical aspects and applications of various models to analyze "time to event" data. Basic concepts such as the survival function, hazard function, right and interval censoring, and common nonparametric and parametric methods and models for analyzing survival data will be covered. The proportional hazards (PH) model with fixed and time dependent covariates, the stratified PH model, sample size calculations, and regression diagnostics for survival models will also be covered.

Prerequisites: BIOS 5200, EPID 5200, BIOS 5202

## BIOS 5204: Statistical Computing (3)

This course will give students a working knowledge of two statistical analysis software packages, SAS and SPSS. Emphasis will be placed on the basics of data management of files, data manipulation, basic data display, graphical display of data and statistical analysis. Although the Windows environment will be discussed, emphasis will be placed on the writing of program code. Prerequisites: BIOS 5200, EPID 5200.

#### **Biostatistics Concentration Elective Courses (12 credits)**

Students can choose 4 elective courses from the list below. Students may also opt to choose courses from other departments to satisfy the elective requirements.

# BIOS 5300: Introduction to Sampling (3)

This course presents practical sampling methods and their theoretical background. It covers simple random, stratified, systematic, and simple stage cluster sampling techniques. In addition, ratio, regression, and difference estimation will be covered. An emphasis will be placed on sampling human populations in large communities.

Prerequisites: BIOS 5200, EPID 5200.

# BIOS 5301: Survey Research Methods (3)

This course provides an introduction to the design, analysis, and interpretation of sample surveys. Types of sampling covered will include simple random sampling, stratified random sampling, systematic sampling, cluster sampling, and multi-stage sampling. Methods of estimation are described to estimate means, totals, ratios, and proportions. Development of sampling designs combining a variety of types of sampling and methods of estimation, and detailed description of sample size determinations to achieve goals of desired precision at least cost will be covered.

Prerequisites: BIOS 5200, EPID 5200, BIOS 5201, BIOS 5204, EPID 5201.

## BIOS 5302: Advanced Experimental Design (3)

This intermediate course covers a broad perspective of experimental designs covered in public health, including various ANOVA designs, case-cohort studies, case-crossover studies, cross sectional studies, prospective and retrospective cohort studies, randomized clinical trials and meta analysis. The advantage and disadvantages of the various studies are discussed and emphasis is placed on selection of the appropriate study, sample size estimation and controlling for sources of bias and reduction of variability.

Prerequisites: BIOS 5200, EPID 5200, BIOS 5201, BIOS 5202, BIOS 5204, EPID 5201.

## BIOS 5303: Nonparametric Statistics (3)

This course covers a survey of topics related to distribution-free approaches to statistical inference. Topics will include: Fisher's method of randomization; distribution free test procedures for means, variances, correlations, and trends; and rank tests. Relative efficiency, asymptotic relative efficiency and normal-score procedures will be covered. Binomial and hypergeometric distributions are covered to develop a variety of test and interval estimation procedures.

Prerequisites: BIOS 5200, EPID 5200, BIOS 5201, BIOS 5202, BIOS 5204, EPID 5201.

## BIOS 5304: Design and Analysis of Clinical Trials (3)

The course will cover the clinical trial process from design and conduct through statistical analysis, clinical study report, and submission to regulatory agencies.

Prerequisites: BIOS 5200.

## Community Health Sciences (Urban & Immigrant Health) Concentration Core Courses (12 credits) CHSC 5202: Issues in the Health of Immigrant Populations (3)

Emigration from another country can have important effects on the health of the émigré. The demographic, scientific, clinical, economic, social, political, ethical, and legal factors of the country of origin interact with those of the new country. They are manifest in different ways in the health of immigrants – new and old. This course will consider these and other related public health issues across the lifespan.

## CHSC 5203: Sex, Gender, Race, and Ethnicity in Health (3)

The health and well-being of human beings have been under intense scrutiny and involved important changes during the 20th century. Gender and racial/ethnic inequities are being addressed and gaps in knowledge narrowing. These changes involve multiple factors. This course considers many of those factors as they interact with demographic, scientific, clinical, economic, social, political, ethical, and legal issues.

# CHSC 5205: Urban Health Issues (3)

The goal of this course is to prepare public health professionals to analyze and intervene in urban health issues. The course explores the health of urban populations around the world, with a special focus on New York City, from historical, economic, social, spatial, and medical perspectives. Key concepts include social capital, social cohesion, social hierarchies, social networks, public health infrastructure, healthy neighborhoods, health disparities, globalization, and micro-geographic analysis. Each semester the class will explore three health topics in depth and will organize a neighborhood mini-conference on one of these topics in collaboration with local stakeholders. In addition, each student will perform weekly analyses of his/her neighborhood of residence and periodic analyses of the neighborhood surrounding SUNY-Downstate.

## CHSC 5206: Program, Planning, and Evaluation (3)

Community-based programs that are designed to change health-related behaviors comprise the vast majority of the public health efforts to reduce the morbidity and mortality in populations. This course covers the life stage of community-based programs from inception, implementation, and sustainability. The course applies the theoretical concepts from the social and behavioral sciences, health education, and health communication to the planning, design, and evaluation of community-based interventions. A program-planning framework provides the methodology to examine social and behavioral determinants of health and to identify appropriate intervention and evaluation design. Characteristics of theory-based interventions are discussed, critiqued, and assessed for relevance to the needs of the students who will have the opportunity to apply these ideas to their own work. Prerequisites: CHSC 5200.

#### Community Health Sciences (Urban & Immigrant Health) Concentration Elective Courses (12 credits)

Students can choose 4 elective courses from the list below. Students may also opt to choose courses from other departments to satisfy the elective requirements.

# PUBH 5200: Introduction to Public Health (3)

Introduction to the broad concepts of public health practice including the mission, core functions, structure, policy role, program activities, and collaborative endeavors of public health agencies. Theoretical and practical perspectives are studied to illustrate contemporary strategies for health promotion and disease prevention at local, state, and national levels.

## CHSC 5204: Community Organization (3)

Emphasis on community organizations as a major interventional approach to community dynamics, social change, and community participation in addressing health problems. The course explores methods for identifying and analyzing community health problems and their causes.

## CHSC 5300: Introduction to Research (3)

Basics for participating in the development, implementation, and evaluation of research studies in public health, particularly healthcare delivery. Each student will be expected to develop and present a research proposal. Prerequisites: BIOS 5200, EPID 520.

# CHSC 5301: Human Sexual Behavior (3)

Focus on aspects of human sexual behavior from a psychosocial and behavioral perspective. A brief review of human anatomy and physiology as well as developmental abnormalities will be considered. The purpose is to educate health professionals about the strong influences of sexuality in all its facets.

# CHSC 5302: Social Marketing (3)

Social marketing is a key ingredient in strategies to develop, implement, and evaluate health communication and education programs. This course will focus on developing and presenting a social marketing plan addressing a specific public health issue among a specific racial or ethnic group.

# CHSC 5303: Issues in HIV Prevention (3)

Different facets of HIV prevention including the risk factors and the impact of social, economic, racial/ethnic, cultural, and religious factors on the development of the disease. Studies focusing on different communities at high risk for the disease will be studied.

# CHSC 5304: Planning Pediatric Interventions (3)

This course will require systems thinking in terms of how individuals, social networks, communities and organizations interact and affect the public health on a local, state, national and international level. This course will challenge you to identify the specific pediatric health issues affecting a local community, prioritize them, outline interventions and describe evaluation techniques for assessing the effectiveness of the interventions. The course will be interactive and encourages discussion of unique and diverse approaches to both new and long-standing problems affecting the pediatric population in this area. This course will focus on practical application and real-life scenarios. Although pediatric health issues will be the focus, the principles learned should be applicable to health concerns of other populations.

# CHSC 5305: Issues in Adolescent Health (3)

The myriad factors that influence adolescent development are considered juxtaposed against societal and public health issues. This course provides the student with an opportunity to enhance knowledge regarding this period of human development.

# CHSC 5306: Understanding Health Behavior): Psychosocial and Behavioral Epidemiology (3)

This course provides an introduction to the social, psychological, and behavioral issues that influence patterns of health and health care delivery. The focus is on the integration of the biomedical, social, psychological, and behavioral factors that must be taken into consideration when public health initiatives are developed and implemented. The course is based on ecological theories of influences on health behavior. The course also includes the application of epidemiologic methods to the study of social, psychological, and behavioral influences on health, disease, and recovery/mortality.

Prerequisites: BIOS 5200, EPID 5200, CHSC 5200.

# CHSC 5307: Early Child Development: A Public Health Perspective (3)

This course introduces students to early child development, the conditions which shape it, and how developmental and learning problems arising in early childhood (here collectively termed "developmental disorders" - DD) are identified and addressed at an individual and a population level.

The focus of the course will be on preventive and treatment interventions for DD's based in the home, community programs, and health care settings in the United States and internationally. Through field visits and presentations, the students will become familiar with how such interventions are conducted, and the role of different stakeholders (families, public health programs, NGO's,

health care providers, school systems) in planning, funding, running and evaluating them. During the course, students will gain experience in doing basic developmental screenings, assessing the home caregiving environment, planning interventions and preparing and presenting messages about early child development for families.

## CHSC 5308: Public Health Preparedness and Response to Emergencies (3)

This course investigates the role of public health professionals in planning and responding to "all hazards" emergencies that stress the public health and healthcare system. Topics will include:public health law; federal funding programs forpreparedness and response; incident management system; training and exercises development; chemical, biological, radiological, nuclear and explosive events; hazard vulnerability analysis; and the psychosocial impact of disasters. The course will be problem based and explore current topics such asH1N1, structural collapses, coastal storms, etc. A part of the course will also focus onrecovery and long term impacts (psychosocial, environmental, health effects, etc.). Students will useactual emergency management planning tools and templates from the federal government, supporting agencies and NYC, as well asjournal articles. Prerequisites: CHSC 5200.

# CHSC 5309: Introduction to Global Public Health (3)

Introduction to Global Public Health through discussion of global public health issues in different geo-political settings, of health dynamics and their impact on global health, and the role of public health in implementing interventions.

Students will realize the basic principles of Global Public Health through their direct application to three different country scenarios: 1. Earthquake response, 2. Refugee crisis, and 3. Non-crisis foreign healthcare system.

At the completion of the course, students will show a basic understanding of global health terminology, critical global health issues, global health care disparities, important global public health stakeholders, and the role of public health in the global context.

# CHSC 5311: Public Health Practice (3)

This course will provide students with an in-depth understanding of the scope of the public health field and a practical foundation for future career opportunities. Students will become familiar with the evolution of public health as a field, including past achievements as well as current issues and future directions. The course will emphasize the core functions of public health and describe how these functions relate to communities, the role of government, public health agencies, and professionals. This course will feature presentations from experts in the field when appropriate.

# CHSC 5312: Reading Seminar on the Social Determinants of Health (3)

The social, economic, political, and physical conditions in which we live have an enormous impact on public health. These conditions, which are called the social determinants of health, include distribution of power and resources within and across populations, and account for enormous health disparities domestically and globally. In this course, we will engage in an in-depth exploration of the social determinants of health through the critical reading and analysis of books that focus on one or more of these determinants, and will discuss how public health efforts can be leveraged to improve those social conditions that impact health and quality of life.

# CHSC 5313: Public Health and Well-Being (3)

The World Health Organization defines health as a state of complete physical, mental, and social well-being. Policy makers, behavioral economists, public health professionals, health care experts, and others have begun to expand their focus on approaches to reducing illness and suffering to include how best to promote and support thriving and resilient communities,

characterized by high levels of subjective well-being. In this course, we will explore how factors such as resilience, positive affect, optimism, coping style, and social functioning are linked to individual and public health, how features of the social environment and culture impact these characteristics, and how public health professionals can contribute to the design and implementation of interventions at the individual, interpersonal, community, and policy levels in support of health promotion and overall well-being. Prerequisites: CHSC 5200.

# CHSC 5314: Centering Wellness (3)

This course is focused on centering personal wellness inside and outside of the classroom. As emerging public health practitioners, we are often focused on population health. However, public health promotion and disease prevention is not only the responsibility of macro-institutions. Health is created and experienced by individuals and communities within the settings of our everyday lives—where we live, work, learn, play, pray, and love. If we are personally stressed, anxious, depressed, or fatigued, can we consider how that might impact our conceptions and pursuit of greater physical, mental, spiritual, and community health and wellness? As the adage from the 1960s Second-Wave Feminist Movement goes, 'the personal is political.' This course presents the creative arts as tools to promote health and to manage the effects of illness, stress, and trauma. Students will practice critical reading, critical analysis, and creative writing exercises and engage in activities to unlearn and heal oppressive attitudes and behaviors, improve mental and physical health, and promote healthy development. Concepts, such as the life course perspective, cultural humility, public health critical race praxis, intersectionality, and social capital, will be introduced side-by-side with reading and writing works of poetry, memoir, and fiction. Finally, the students will work in groups to study a health issue and produce a creative work and presentation on the topic.

# CHSC 6020: Field Experience in Maternal and Child Health (1-3)

The overall goal of the course is to give the student experience in applying maternal and child health knowledge and skills in an off-campus public health setting. The experience is a planned, supervised, and evaluated internship that takes place in one of a variety of agencies or organizations, including community-based organizations and governmental departments.

## Environmental And Occupational Health Sciences Required Concentration Core Courses (12 credits) EOHS 5201: Introduction to Management, Policy and Law (3)

An overview of the history and current application of laws and rules used to protect the environment. This course is oriented towards United States federal legislation, as well as examples from New York State law. The evolution of specific acts including Resource Conservation and Recovery Act (RCRA), the Clean Air Act (CAA) and Clean Water Act (CWA), the Toxic Substances Control Act (TSCA) and the Occupational Safety and Health Act (OSHA) will be covered. International environmental health laws, including Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), the European toxic substances control initiative, will be included. Emphasis will be placed on viewing environmental and occupational health law from an environmental justice perspective and examining the role of equity in environmental planning, policy-making, decision-making and in the distribution of environmental burdens and benefits.

Prerequisites: EOHS 5200.

# EOHS 5202: Occupational Health (3)

Surveys the history of occupational health, the continuum from exposure to disease, the hierarchy of controls in the workplace, occupational health hazards, legal and regulatory issues, provision of occupational health services, and methods in comprehensive workplace health improvement.

# EOHS 5203: Built Environment & Public Health (3)

Explores basic concepts of toxicology as applied to environmental toxicants including the distribution, metabolism, and elimination of environmental chemicals in the body. Examines the application of these concepts to the understanding of disease processes resulting from adverse environmental exposures.

# EOHS 5205: Public Health Aspects of Physical Trauma (3)

Examination of injury and violence as seen in urban settings. The course is designed to incorporate models into practical application in communities using case examples.

#### Environmental And Occupational Health Sciences Concentration Electives (12 credits)

Students can choose 4 elective courses from the list below. Students may also opt to choose courses from other departments to satisfy the elective requirements.

# EOHS 5302: Women's Health Policy: Epidemiology and the Environment (3)

This course will identify key indicators of women's health and women's health needs utilizing both environmental health sciences and health policy perspectives. Current and historical examples will highlight how health. Needs, medical practice and policies have evolved over time.

Prerequisites: EOHS 5200.

# EOHS 5304: Case Studies in Environmental Health (3)

In this course, students will review a series of case studies that illustrate core concepts of environmental health science including hazard identification, toxicology, exposure assessment, epidemiology, and risk assessment, communication and policy. Prerequisites: EOHS 5200.

# EOHS 5306: Risk Assessment and Communication (3)

Examines the core foundations of risk assessment, including hazard identification, dose response, exposure assessment and risk characterization. Introduces the basic concepts in risk management and risk communication. Provides an understanding of how risk assessment serves as an interface between science and policy.

Prerequisites: EOHS 5200.

# EOHS 5307: Occupational & Environmental Epidemiology (3)

This course provides an overview of current topics and controversies in occupational and environmental epidemiology. It will provide the student with familiarity with research techniques in this area, and capacity to evaluate current research relevant to public health practice and policy. The course is structured as a seminar, with discussion of research topics and techniques based upon analysis of published papers in the field, both historical and current. Guidance will be provided and students will be expected

to produce increasingly sophisticated critiques of research as the course progresses. Prerequisites: EOHS 5200, BIOS 5200, EPID 5200.

## EOHS 5308: Environmental and Occupational Toxicology (3)

This course introduces the basic concepts of toxicology and their extension to occupational and environmental settings, in order to understand the effects of chemical exposures on populations. Concepts discussed include toxicokinetics and metabolism, dose-response relationships, molecular, cellular and organ responses to toxic chemicals, principles of testing for toxic effects, and factors that increase susceptibility to toxic insult. The course will focus on chemicals and metals found in the workplace setting and the environment, including organic solvents, metals, and pesticides. The course assumes knowledge of college-level chemistry and biology. A background in college organic chemistry and either the introductory SPH Environmental Health or COM Pharmacology course are recommended, though not required.

## EOHS 5309: Remote Sensing and Spatial Analysis (3)

Geographic Information Systems (GIS) provide a powerful tool for analyzing spatial patterns. Applications of spatial analysis are rapidly expanding to encompass diverse phenomena. For example, an epidemiologist might use spatial analysis tools to determine if there is clustering of infectious disease cases near a suspected source of the pathogen. An analyst at an urban public health department might use it to understand how fall injuries are distributed in a particular city and if there are specific environmental reasons for this clustering effect. This research seminar is meant to advance students knowledge of tools available for spatial analysis.

The course embeds learning quantitative research and spatial analysis methods in the context of developing and carrying out unique research questions and learning methods for answering those questions. Early in the semester students will begin to develop research questions that use advanced GIS techniques. In order to assist students with crafting their research questions methodology readings will be provided. While students develop their topics they will also be learning advanced techniques for spatial analysis. Advanced Spatial Analysis topics will include:

- Spatial statistics and cluster analysis
- Spatial interpolation
- Constructing and analyzing networks using Network Analyst
- Remote sensing health and environmental data
- Basic scripting

The course provides a great opportunity to begin testing and developing Culminating Experience or thesis ideas and methods.

# EOHS 5311: Geographic Information Systems for Global Health (3)

This course is an introduction to the concepts of Geographic Information Systems as they apply to public health. It is an intermediate level graduate course in the application of methods for displaying, describing and analyzing spatial environmental exposure and disease data and a doctoral level course for students in any field with an interest in the application of spatial methods to exposure data and disease data. Students in environmental health, epidemiology, and biostatistics are particularly

encouraged to participate. Masters students with the appropriate background may enroll with the instructor's permission. The course will focus primarily on the spatial distribution of risk factors for disease outcomes, but the principles discussed can be broadly applied. All students must be thoroughly computer literate; know Excel and feel comfortable working in a multi-windowed environment.

Attendees will learn the general concepts of GIS, and the particular applications of this technology to public health. They will also acquire hands-on experience using GIS to create GIS layers, using GIS to perform queries and searches, and create maps and reports, including statistical reports. Additionally, students will learn how to properly capture, store and format data so that it can be used in GIS, as well as how to re-format existing data in order to create maps of the data.

## Epidemiology Concentration Required Core Courses (12 credits) EPID 5201: Epidemiologic Research Methods (3)

This course introduces concepts of study design, data management and data analysis that are suitable for epidemiologic research. This course will enable students to design studies and write competitive proposals on contemporary issues in epidemiology and public health affecting immigrant and urban populations. Students will be provided with the practical skills necessary to plan and carry out research projects. Specifically, learners will explore principles and concepts associated with the design of sample surveys that are representative of populations and the analysis of data from such surveys. Throughout the course, students will be asked to prepare comprehensive, concise written reports for a variety of audiences.

Prerequisites: BIOS 5200, EPID 5200.

## EPID 5202: Infectious Disease Epidemiology (3)

The objectives of this course are to cover the two broad components of infectious disease epidemiology: 1) the epidemiologic methods applied to investigating infectious disease distribution and etiology, and 2) a review of the infectious diseases of major public health significance. Outbreak investigation, disease surveillance, study design, geographical information systems, the microbiology of pathogens, and an introduction to concepts in mathematical modeling in infectious disease will comprise the first component of the course. A thorough description of the epidemiology, etiology, and prevention, treatment and control of significant established and emerging infectious diseases will comprise the second component of the course. By the end of this course students should have a thorough understanding of the both the practice of infectious disease epidemiology and the current and emerging global burden of infectious disease.

#### Prerequisites: EPID 5200.

## EPID 5203: Chronic Disease Epidemiology (3)

This course will provide students with an overview of the epidemiology of the most common chronic diseases and conditions in the United States. It will focus on the measurement of chronic disease outcomes and risk factors, epidemiologic study design for chronic disease, and the critical evaluation of published literature on epidemiologic studies of chronic disease.

#### Prerequisites: EPID 5200.

# EPID 5205: Epidemiologic Research Methods II (3)

This course is the culmination of the principles of epidemiology methodology. It follows the introduction to epidemiologic concepts in EPID 5200 and the intermediate methods covered in EPID 5201. This course is comprised of two distinct sections. The first half focuses on concepts of causality, by examining both the philosophical underpinnings and the statistical and logical applications of

associative inference. Major concepts given in-depth coverage include the following: the comparison of and contrast between measures of effect and measures of association; confounding, effect modification and bias, with an emphasis on the tools applied in their measurement and assessment; the purpose of randomization. The second half of the course focuses on the practical implementation of various modeling strategies to measure the association between an exposure and outcome while simultaneously addressing confounding, effect modification and biases. Outcomes commonly encountered in epidemiology will be explored, and therefore will demonstrate the application of linear, logistic and Poisson regression techniques. The use of propensity score models for unmeasured confounding will also be considered. The modeling mechanics of each technique will be taught, but always with an emphasis on each technique's strengths and limitations and its overall relevance to causality and inference. Moreover, these specific regression techniques are located in a broader general approach to the analysis of an exposure-outcome association, which applies formal univariate and bivariate association techniques prior to the application of multivariable methods. As such, the student will obtain a thorough understanding of causal interpretation of exposure-outcome associations by developing a strict step-by-step approach to epidemiologic analyses. Prerequisites: BIOS 5200, EPID 5200, EPID 5201.

#### **Epidemiology Elective Courses (12 credits)**

Students can choose 4 elective courses from the list below. Students may also opt to choose courses from other departments to satisfy the elective requirements.

# EPID 5300: Cancer Epidemiology (3)

This course reviews principles and methods used in the investigation of cancer incidence and mortality. Basic concepts of cancer biology and the role of environmental determinants (e.g. tobacco, alcohol, radiation, chemicals, stress, and nutrition) and genetic susceptibility will be reviewed. Using data from the NYS Cancer Registry, we will examine the sociodemographic magnitude of cancer in Brooklyn, and discuss factors influencing cancer prevention and control efforts. Prerequisites: BIOS 5200, EPID 5200.

# EPID 5301: Reproductive Epidemiology (3)

This course explores the nature and determinants of ill-health in pregnant women and babies, and to demonstrate the contribution of epidemiologic methods to problem identification and to the design and evaluation of strategies to improve maternal and child health. Topics of discussion include disparities between various population groups, contraception, menstruation, fertility, abortion, menopause, and maternal morbidity and mortality. Discussion of contemporary issues in safe motherhood and perinatal health in developing countries will also be provided throughout the course.

Prerequisites: BIOS 5200, EPID 5200.

## EPID 5302: Epidemiology of HIV/AIDS

This course represents a detailed model of how to tackle the epidemiological and public health aspects of a viral infection; it provides information on different routes of transmission, worldwide temporal changes in infection rate and persons at risk, historical interventions to control the diffusion of the infection along with their success rate. The course also provides knowledge and understanding of the infection versus the clinical manifestation of the disease. Prerequisites: BIOS 5200, EPID 5200. Specific topics include epidemiologic aspects of new treatments of the infection, surveillance of infection and disease trends, prevention strategies, changes in laboratory methods for virus detection and diagnosis and their impact on disease surveillance.

# EPID 5303: Nutritional Epidemiology (3)

This course applies epidemiologic methods and principles to current studies of diet, nutrition and chronic disease. Students will gain expertise in understanding the current state of knowledge on the relationship between nutrition and disease including the role of co-factors. Strengths and weaknesses of the methods available to assess exposure in nutritional epidemiologic studies will be presented as students will be asked to critically evaluate epidemiologic evidence on diet-disease relationships. Other topics to be covered include: evaluation of methods to prevent nutrition-related diseases through strategies aimed at promoting population based dietary change, identification, summarization and interpretation of a range of materials relevant to the specification of priority nutrition problems in a given population; discussion of the constraints involved in program implementation; presentation of a proposal for a nutrition intervention orally and in summary written form.

Prerequisites: BIOS 5200, EPID 5200.

# EPID 5305: Epidemiology of Aging (3)

This course will prepare students to effectively study health characteristics of the rapidly increasing population of older adults in the United States. Some of the topics covered will include changes in national and international age and lifespan demographics; theories of aging; the limits of the human lifespan and life-extension efforts; the interrelation of aging, health, and the environment; measurement of survival, mortality, and cause of death; measurement of physical functioning and activities of daily living; age- and disease-related changes in cognitive functioning; depression in older adults; injury (falls, driving accidents); the influence of age on disease and how to account for the age effects in the study of disease; health, frailty, and "successful" aging. Students will examine methods for conducting epidemiological studies in older populations and the implications of an aging society on public health practice.

Prerequisites: BIOS 5200, EPID 5200.

# EPID 5307: Critical Approaches to the Epidemiologic Literature

This course will develop a systematic approach to the critical appraisal of the epidemiologic literature. Students will be required to follow a standardized outline for the critical review of published scientific papers drawn from both chronic disease and infectious disease epidemiology. The objectives for this course are twofold. First, the students are to gain a rigorous technique for assessing the quality of the science behind the epidemiologic methods in published studies. Second, students are to apply nuanced critical thinking to scientific results in published studies.

Prerequisites: BIOS 5200, EPID 5200, EPID 5201, EPID 5205.

## EPID 5308: Reproductive and Perinatal Epidemiology

Reproductive and perinatal epidemiology is a profoundly important aspect of public health. Both the reproductive and perinatal time periods set the pace not only for immediate birth outcomes, but also health over the life span. This reproductive and perinatal epidemiology course covers broad reproductive and perinatal health issues from thepre-conception, prenatal, delivery and postnatal periods and emphasizes health issues affecting both women and infants. Topics of discussion includedisparities between various population groups, male and female fertility, fetal growth, maternal and infant morbidity and mortality, study designs and causal inference.

Prerequisites: BIOS 5200, EPID 5200.

# EPID 5311: The Epidemiology of Emerging Infectious Diseases (3)

This course explores the landscapes of emerging infectious diseases in several varied geographies and ecologies. We first explore the biologic, ecologic, physical, and social concepts of emerging and re-emerging infections. We then identify and apply methodology relevant to the surveillance and investigation of such infections. Several case studies of emerging/re-emerging infectious diseases will be used to develop techniques for applied infectious disease epidemiology specific to the unique context of these emergent infections. Some examples may include dengue fever, Lyme disease, West Nile virus, pandemic influenza, severe acute respiratory syndrome (SARS), extensively drug-resistant tuberculosis (XDR-TB), methicillin-resistant staphylococcus aureus (MRSA), hemorrhagic fevers, Henipavirus infections, and measles. All techniques are grounded in a landscape epidemiology approach to infectious disease, which recognizes spatial and ecologic parameters as critical to the etiologic understanding of these important diseases. The relationships between humans and the environment, humans and animals (both wild and domestic), and humans and humans, will be explored in both urban and rural contexts to identify critical epidemiologic features that can be exploited by pathogens to cause disease.

Prerequisites: EPID 5200, EPID 5202

## Health Policy and Management Concentration Required Core Courses (12 credits) HPMG 5202: Health Care Advocacy and Politics (3)

This course will review basic legal and legislative processes at both state and federal levels. Students will learn how changes are made in the health system and ways of abetting change.

#### Prerequisite: HPMG 5206.

## HPMG 5203: Health Management Concepts (3)

Basic concepts of management and organization behavior will be explored in this course. The role of management in complex organizations and the ways in which organizations change will be discussed. Students will learn how to relate to supervisors and staff and how to encourage optimal working conditions.

#### Prerequisite: HPMG 5206.

## HPMG 5204: Access, Cost and Quality of Care (3)

This course will look in detail at the U.S. Health care system in terms of its major components, their interactions, and how to best effect positive change that will improve health and health care services for the population.

#### Prerequisite: HPMG 5206.

## HPMG 5207: Principles in Hospital Management (3)

This course helps prepare a student for potential leadership positions in hospitals and other healthcare settings. It explores in depth a range of practical topics including governance, legal and ethical issues, risk management, quality management, accreditation, licensing, marketing, financial management, regulatory compliance, strategic planning, departmental roles and the migration of services to ambulatory settings. Case studies, team exercises, and interviews with organizational leaders form the framework of the course.

Prerequisite: HPMG 5206.

#### Health Policy and Management Concentration Elective Courses (12 credits)

Students can choose 4 elective courses from the list below. Students may also opt to choose courses from other departments to satisfy the elective requirements.

## HPMG 5201: Health Policy in the Delivery System (3)

This course focuses on the intersection between public health, policy, and politics. It provides an orientation to health policy, politics, and the policy in the U.S.

#### Prerequisite: HPMG 5206.

## HPMG 5306: Policy Studies in Urban and Immigrant Health (3)

This course will explore from a public health perspective the range of policies that affect specific vulnerable groups. This approach exemplifies a core aspect of Principles of the Ethical Practice of Public Health:

Public health should advocate and work for the empowerment of disenfranchised community members, aiming to ensure that the basic resources and conditions necessary for health are accessible to all.

Part of this hybrid course will take place asynchronously on-line. Each semester it will focus on three or four groups, which may vary over time. Examples may include injured veterans, undocumented immigrants, youth gangs, refugees, sex workers, or persons with chronic mental illness. A multidisciplinary faculty will explore with students the relevant policy issues and the potential public health responses. Students will complete a service-learning project in collaboration with members of one of the groups studied.

No prerequisite. Open to non-matriculated students with instructor's approval.

### HPMG 5307: Global Issues in Maternal and Child Health Policy (3)

This course helps prepare the student for a public health career to improve maternal and child health globally or locally. Part of this hybrid course will take place asynchronously on-line. Case studies from around the world will be the basis for critical analysis of current policies and of the evidence base for successful interventions. Typical issues for study include maternal mortality, contraception, safe abortion, female genital cutting, child survival, stillbirths, refugee populations, birth outcomes among immigrants to the US, sex trafficking, and toxic environmental exposures to women and children. All students will participate in a service-learning project related to the course content.

Prerequisite: HPMG 5206.

## HPMG 5308: Public Health Law and Bioethics (3)

This course explores the basic tenets of bioethics along with basic principles of laws pertaining to public health. Practical applications of these foundational principles will be explored and demonstrated using actual cases, real-life scenarios requiring critical thinking and other assignments which call upon a student's ability to balance established rules and accepted practices with their personal opinions. Throughout the course distinctions will be made between health law and public health law and the relevance to various professional practices will be delineated. Contemporary challenges in health care and public health delivery, especially in urban settings that address immigrant issues, will be emphasized. The students will emerge from the course with a better understanding of the legal milieu in which we must function. Students also will be better prepared to enter public health-

related practice with a basic understanding of bioethical principles relevant to contemporary challenges in public health and health care practice.

No prerequisite. Open to non-matriculated students with instructor's approval.

### HPMG 5309: Policy Issues in Mental Illness (3)

This entirely on-line and asynchronous course over a semester prepares the student to participate as a public health professional in analysis and advocacy for effective public health policies on the major mental illnesses globally: schizophrenia, bipolar disorder, and major depression. The course emphasizes current scientific understanding of these disorders within a social-ecological framework. The class analyzes past and current federal and state laws on treatment, income support, and criminal justice involving the mentally ill in terms of effectiveness and social justice. A special focus of the class is policy implications for urban and immigrant populations. The class also compares U.S. practices with emerging global health models of best practices.

#### HPMG 5311: International Healthcare Systems (3)

The goal of this course is to compare and consider the different aspects of international health care systems The course will examine health care, financing, organization, governance, coordination, disparities, and practice.

At the conclusion of the course, you should be able to:

- \* Identify the main components and issues of each organization, financing, and delivery of health services in the particular country
- \* Discuss the policy process for each system and compare it with selected others
- \* Identify key factors and their impact on the different health care systems
- \* Evaluate and compare the key aspects of each system

#### **Field and Culminating Experience**

All MPH students must complete a Field Experience and a Culminating Experience.

#### PUBH 6500: Field Experience (1)

This course is an opportunity for students to apply the knowledge and skills learned in the classroom directly in a fieldwork experience. After completion of an online module on professionalism, the student will work at an approved external site, typically a local or state health agency or a local organization under the supervision of a public health professional. If a student is able to do a placement only in his or her regular place of employment, the assignment must extend beyond or be something other than his or her regular work duties and allow application of knowledge and skills learned in the classroom. *Prerequisite: All core courses.* 

#### **Culminating Experience:**

All MPH students must complete a Culminating Experience within their chosen concentration.

#### BIOS 6001: Culminating Experience in Biostatistics (2)

The Culminating Experience in Biostatistics allows the student to demonstrate the ability to integrate knowledge and skills in a Final Project similar to some aspect of practice as a public health professional. The faculty uses the Culminating Experience to judge whether the student demonstrates proficiency in the competencies required for public health practice.

#### Prerequisites: All CORE and BIOS Track Courses.

#### CHSC 6001: Culminating Experience in Community Health Sciences (2)

The Culminating Experience in Community Health Sciences allows the student to demonstrate the ability to integrate knowledge and skills in a Final Project similar to some aspect of practice as a public health professional. The faculty uses the Culminating Experience to judge whether the student demonstrates proficiency in the competencies required for public health practice.

Prerequisites: All CORE and CHSC Track Courses.

#### EOHS 6001: Culminating Experience in Environmental and Occupational Health Sciences (2)

The Culminating Experience in Environmental and Occupational Health Sciences allows the student to demonstrate the ability to integrate knowledge and skills in a Final Project similar to some aspect of practice as a public health professional. The faculty uses the Culminating Experience to judge whether the student demonstrates proficiency in the competencies required for public health practice.

Prerequisites: All CORE and EOHS Track Courses.

#### EPID 6001: Culminating Experience in Epidemiology (2)

The Culminating Experience in Epidemiology allows the student to demonstrate the ability to integrate knowledge and skills in a Final Project similar to some aspect of practice as a public health professional. The faculty uses the Culminating Experience to judge whether the student demonstrates proficiency in the competencies required for public health practice.

Prerequisites: All CORE and EPID Track Courses.

#### HPMG 6001: Culminating Experience in Health Policy and Management (2)

The Culminating Experience in Health Policy and Management allows the student to demonstrate the ability to integrate knowledge and skills in a Final Project similar to some aspect of practice as a public health professional. The faculty uses the Culminating Experience to judge whether the student demonstrates proficiency in the competencies required for public health practice.

#### Prerequisites: All CORE and EPID Track Courses.

# **DrPH Academic Requirements**

Concentrations are offered in:

- Community Health Sciences
- Environmental and Occupational Health Sciences
- Epidemiology

The entering Doctor of Public Health student must have completed an MPH degree or equivalent degree that includes coursework in the five core disciplines of public health: Biostatistics, Community Health Sciences, Environmental and Occupational Health Sciences, Epidemiology, or Health Policy and Management. Previous experience in public health is desirable. Completion of the Doctor of Public Health Program requires a total of 45 credits: 30 credits of required course work, a 3 credit Field Experience, and 12 credits of Dissertation, which would include public health research and/or practice.

The Doctor of Public Health Program maintains the MPH Program focus on urban and immigrant health while greatly expanding the opportunities of students to develop broad and deep competence as public health practitioners.

#### **Doctor of Public Health Trajectory**

Graduates will complete thirty (30) credits of course work, a three (3) credit Field Experience, plus twelve (12) credits for the dissertation, for a total of 45 credits.

The requirements for the DrPH are:

- Twelve (12) credits of Doctor of Public Health core courses, preferably completed by the end of the second semester.
- Twelve (12) credits of the Concentration core courses taken early in the course of the program.
- Six (6) credits of electives.
- Three (3) credits of a Field Experience.
- Passing Grade on the Qualifying Examination
- Twelve (12) credits of dissertation.

#### **Requirements for Course Work**

#### Academic Advising

Each Doctor of Public Health student will be assigned a Faculty Advisor who will be available to the student throughout the program. The advisor and student will meet at least once a semester to discuss the student's course work, status, and plans throughout the degree completion. This Faculty Advisor will have expertise in the Concentration chosen by the student: Epidemiology, Environmental Health, or Community Health. That Faculty Advisor will also work with the student in considering doctoral Dissertation topics and guiding the student to select other appropriate faculty to serve on the committee.

#### Courses

#### Core Requirements:

4 courses at 3 credits each for a total of 12 credits:

- Quantitative Research Methods for Public Health Practice
- Study Design in Public Health Practice
- Public Health Management and Ethics
- Public Health Policy and Politics Seminar

#### **Concentration Core Courses:**

- 4 courses at 3 credits each in one of the following disciplines for a total of 12 credits:
  - Community Health Sciences
  - Environmental & Occupational Health Sciences
  - Epidemiology

#### Elective Courses, by Concentration:

- 2 elective courses, at 3 credits each, for a total of 6 credits
- While electives are usually taken within the selected discipline, the student may, with faculty approval, take at least one elective outside of his/her discipline. Students will also have the option of developing individualized courses of independent study to enhance competencies for their intended career.

#### Field Experience in One of the Concentrations:

3 credits of Field Experience.

#### Passing Grade on the Qualifying Examination (QE)

#### Dissertation

12 credits of dissertation.

**Dissertation Credits:** A student may enroll for Dissertation credits after the student has passed his/her Qualifying Examination. Twelve (12) credits are required to complete the dissertation. The 12 credits can be allocated in several ways, but must be done with the approval of the student's advisor.

- The preferred method is for the student to take a minimum of one (1) to three (3) credits per semester upon successful completion of his/her Qualifying Examination.
- If the student has finished all 12 credits and still has not completed the dissertation, then the student must continue to sign up for 1
  Dissertation credit each semester until the Final Dissertation has been completed.
- In exceptional circumstances, and with the approval of the Faculty Advisor, a student can sign up for all 12 credits in one semester.
- Students who register for Dissertation credits in any semester are expected to produce satisfactory work during that semester for which they
  will receive a grade. Dissertation credits are graded as either PASS or FAIL. Students who do not produce satisfactory work while registered

for Dissertation credits will receive a failing grade. The amount of work produced by a student while registered for Dissertation credits must be proportional to the number of credits for which they are registered.

Steps required to complete the Doctor of Public Health degree:

- Passing the Qualifying Examination (QE), which may be taken only after a student completes all DrPH core and DrPH concentration core courses, as well as the Field Experience.
- Completion of the Dissertation Proposal and Oral Defense of Dissertation Proposal,
- Completion of the written Dissertation, and
- Completion of the Dissertation Defense.

#### Advancement to Candidacy/Dissertation

A student may begin working on the Dissertation only after the student has passed his/her Qualifying Examination.

#### **Qualifying Examination (QE) Format**

Two-day exam (the two days are separated by 1 week):

#### Day 1:

Student will choose to answer 4 out of 6 short essay questions that originate from the core courses within her/his department; in each question the student is asked to apply core content to a specific real-world situation. The student will have approximately 6 hours to complete the exam questions; Laptops with no internet access will be provided to the students. Students will not be allowed to refer to notes/texts from coursework.

#### Day 2:

Part 1: Student will choose to answer 2 out of 4 short essay questions that cover breadth topics stemming from the 4 Doctor of Public Health core courses. By answering these questions the student is expected to demonstrate the ability to work with a range of issues as public health leaders. The student will have approximately 3 hours to complete those questions. Laptops with no internet access will be provided to the students. Students will not be allowed to refer to notes/texts from coursework.

Part 2: Student will be given an empirical research article to critique. The student will need to respond to approximately 10 questions regarding the article. The questions will focus on core Doctor of Public Health competencies and will not be specific to a content area; in answering this set of questions the student can demonstrate the ability to use professional literature in a meaningful and practical way to address public health problems. The student will have approximately 3 hours to complete this. Laptops with no internet access will be provided to the students; Students will not be allowed to refer to notes/texts from coursework Sitting for the Exam:

To maintain matriculation, all doctoral students who are scheduled to sit for the DrPH Qualifying Exam must register for 1 dissertation credit in that specific semester.

If a student fails one or both sections of the exam, s/he will be expected to register for another dissertation credit the following semester.

Students are not allowed to sit for the QE unless they have successfully completed all core and departmental courses as well as the Field Experience. Students are not allowed to sit for the exam at the end of a semester in which they are taking their final course(s).

The exam will be scheduled for two days (separated by 1 week) at the end of the Fall and Spring semesters. For a student to be eligible to take the exam, s/he needs to have completed all DrPH core and concentration core course work, as well as the Field Experience. The Program of Study Form needs to be completed with all the courses, the semesters in which they were taken and the corresponding grades filled in. The student can get an updated copy of the form from the Assistant Dean for Enrollment and Student Affairs. The student needs to have his/her Department Chair and Faculty Advisor sign off on the form and then the form needs to be submitted to the Assistant Dean for Enrollment and Student of Enrollment and Student Affairs. The student Affairs. The student needs to present the form and give the Department Chair (and the resulting Qualifying Exam Ad Hoc Committee) at least 8 week notice (prior to the end of the semester), so that there is time for the exam questions to be generated. If the student does not feel that s/he is ready, then the student will need to wait until the two dates at the end of the following semester to take the exam.

#### Qualifying Exam (QE) Ad Hoc Committee:

A student will be eligible to take the exam after s/he has completed all DrPH core and concentration core course work, as well as the Field Experience. The Qualifying Examination evaluates how well the student has mastered the DrPH core coursework and the DrPH concentration core coursework. The QE Ad Hoc committee will consist of three members: 2 from the student's home department and 1 from an outside department; The chairperson of the home department will choose the two faculty from her/his department and will designate 1 as the chair of that student's QE committee. The department chair will also contact a chair from another department to choose 1 faculty member as the outside department QE committee member.

The two members from the home department will generate the six exam questions from the home department with input from the faculty in their department who taught the departmental core courses for the particular student/s. These two members will also generate a set of bullet points of content that needs to be covered in the student's responses to the questions. They will ultimately be responsible for deciding whether the answers to each of the home department questions warrant a pass or a fail. The QE committee member from the outside department will be responsible for generating the four questions derived from the core Doctor of Public Health courses and their answers with the assistance of others in their department as well as the instructors of the student's core courses. This person (with oversight from the rest of the QE committee) will decide whether the answers to the two (out of four) questions warrant a pass or a fail. If there is more than one student from the same cohort taking the exam (i.e., students who took the same courses at the same time with the same professors), then the "outside" faculty members from all the QE committees can work together to generate the four exam questions so that the students receive the same questions.

The article critique will be given to all students as it will likely be an article from American Journal of Public Health (AJPH) or a similar journal that is not specific to any one department. The Chair of the QE Ad Hoc Committee/s (depending on how many students are taking the exam), will generate the questions and criteria for passing the article critique portion of the exam.

If a student fails only one part of the exam (Day 1 or Day 2), s/he is only required to retake that part of the exam. The student should retake the exam the next time the exam is given (either the following Dec or May). If a student fails both parts of the exam, s/he is required to take the entire exam over. A student is only allowed one opportunity to retake the exam.

#### **Doctor of Public Health Dissertation: 12 credits**

Purpose: The purpose of the Doctor of Public Health Dissertation is to demonstrate that the student:

- understands the diverse aspects of the field of public health and his or her particular concentration area within that field.
- is able to appropriately frame his or her study question(s) and related tasks to answer the question(s).
- can carry out the tasks necessary to complete the study can produce a final paper that is worthy of publication.

The Doctor of Public Health Dissertation must be:

- based on an original public health project .
- worthy of publication.
- acceptable to the sponsoring Department and to a committee of Dissertation readers.

The Dissertation process consists of two (2) major stages:

- the Dissertation Proposal and Oral Defense of Dissertation Proposal.
- the written Dissertation and Dissertation Defense.

**Dissertation Proposal**: The Dissertation Proposal should contain a literature review and a conceptual/methodological framework and follow the format of a grant proposal in the student's area of concentration.

The proposal must include:

- a literature review
- a statement of the research question and research objectives
- the methodological approach to be utilized
- anticipated results and limitations
- the overall significance of the proposed research
- a timeline for completion of the Dissertation

**Oral Defense**: If the Faculty Advisor (the Chair of the Dissertation Proposal Committee), and the other members of the Dissertation Proposal Committee find the proposal to be acceptable, an Oral Defense of the Dissertation Proposal will be scheduled. If the student successfully completes the Oral Defense, he or she will proceed to the actual research and writing of the Dissertation.

**Dissertation Proposal Committee**: The Dissertation Proposal Committee will consist of a minimum of three (3) people— a Departmental Chair from the student's department and (2) full time faculty from outside the student's department at SPH. On occasion, a member from another institution may be considered. Outside members must hold a Doctoral degree in a relevant subject. The Chair of the Dissertation Proposal Committee will not be a member of the QE Ad Hoc Committee.

**Dissertation:** Once the Dissertation Proposal Committee has found the Dissertation Proposal to be acceptable, the student will then proceed to the research and Dissertation writing guided by the Dissertation Committee and the Faculty Advisor. It will be incumbent on the student to ensure that the Dissertation format meets the standards and requirements of SUNY Downstate Medical Center. When the student, Dissertation Committee and Faculty Advisor believe that the process has been completed, the student will submit the draft Dissertation to the Committee.

**Dissertation Defense**: The draft Dissertation will be submitted to the Dissertation Committee at least one month prior to the scheduled date of Dissertation Defense. The defense of the Dissertation will be announced and open to the public.

**Dissertation Committee:** The Dissertation Committee will be comprised of the same members as the Dissertation Proposal Committee. Changes to the Committee are allowed only with the approval of the Dean.

Time Limits: The student will have a total of 8 years in which to defend his or her Dissertation calculated from the date of entry into the doctoral program. Students who take longer than the allotted time will be required to prepare an explanation of the delay to the Chair of their Department and the Dean. They will decide, on a case-by-case basis, if the student will be allowed to remain in the program, or if he or she will have to re-take courses and/or demonstrate competency in a specific area.

#### **Doctor of Public Health Core Requirements**

All Doctor of Public Health students must complete 12 credits of core requirements, which provide the basic knowledge in major areas of public health.

| Course Number | Course Title   | Credits |
|---------------|--|---------|
| BIOS 7200     | Quantitative Research Methods for Public Health Practice | 3       |
| PUBH 7201     | Study Design in Public Health Practice                   | 3       |
| HPMG 7200     | Public Health Management and Ethics                      | 3       |
| PUBH 7200     | Public Health Policy and Politics Seminar                | 3       |
|               |  | Total   |
|               |  | 12      |

#### Doctor of Public Health with Concentrations in:

#### **Community Health Sciences**

This program prepares students to be leaders in the area of health promotion and risk reduction by developing the knowledge, values, and skills needed to effectively plan, design, implement, and evaluate social and behavior change programs. Graduates will be prepared to serve in a leadership capacity in health promotion organizations, will be able to effectively conduct program planning and evaluation, and will be able to teach and conduct health promotion research in academic and practice settings.

| Course Number | Course Title  |         |               | Credits            |
|---------------|---|---------|---------------|--------------------|
| CHSC 7201     | Qualitative Research Methods for Public Health Practice |         |               | 3                  |
| CHSC 7202     | Methods of Community Intervention and Research          |         |               | 3                  |
| CHSC 7203     | Program Evaluation: Theory, Practice, and Research      |         |               | 3                  |
| CHSC 7204     | Health Promotion Seminar                                |         |               | 3                  |
|               |   |         |               | <b>Total</b><br>12 |
| Course Number | Course Title  |         |               | Credits            |
| CHSC 7000     | Field Experience in Community Health Science            |         |               | 3                  |
| Course Number | Course Title  |         |               | Credits            |
| PUBH 8001     | Doctor of Public Health Dissertation                    |         |               | 12                 |
| Course Number | Course Title  | Credits | Prerequisites |                    |
| CHSC 7300     | Theories of Health Behavior                             | 3       | BIOS 7200 o   | r BIOS 5204        |
| CHSC 7301     | Psychosocial and Behavioral Epidemiology                | 3       | BIOS 7200     |                    |
| CHSC 7302     | Health Communication Theory and Practice                | 3       |               |                    |
| CHSC 7303     | Survey Research Methods                                 | 3       |               |                    |
| CHSC 7304     | Culture, Class, and Ethnicity in Health Promotion       | 3       |               |                    |
| CHSC 7305     | International Case Studies in Community Health          | 3       |               |                    |
| CHSC 7306     | Advanced Seminar in Urban Health                        | 3       |               |                    |

#### **Community Health Science Concentration Core Courses**

#### **Environmental & Occupational Health Sciences**

Environmental health science is concerned with the study of the adverse impacts of physical, chemical, and biological agents in the environment on human health. To characterize the interface between human health and the environment, it is necessary to utilize a set of tools and methods to quantify or categorize exposure.

The Doctor of Public Health with a concentration in Environmental and Occupational Health Sciences prepares a practitioner with scientific knowledge and managerial skills to assess and resolve environmental issues through applied research, program management, policy guidance, and broad communication.

| Course Number | Course Title  | Credits            |         | Pre-R         | Requisites   |
|---------------|---|--------------------|---------|---------------|--|
| EOHS 7202     | Advanced Topics in Risk Assessment and Management<br>(Available to DrPH-EOHS students only) | 3                  |         |               |  |
| EOHS 7203     | Environmental Health Policy and Management Systems  | 3                  |         |               |  |
| EOHS 7205     | Safety of the Food Supply   | 3                  |         |               |  |
| EOHS 7300     | Advanced Topics in Occupational Health  | 3                  |         | PUB<br>instru | IS 5202, BIOS 7200,<br>H 7201, or by<br>uctor permission as the<br>requisite for this course                     |
|               |   | <b>Total</b><br>12 |         |               |  |
| Course Number | Course Title  |                    |         | Cred          | lits   |
| EOHS 7000     | Field Experience in Environmental and Occupational He                                       | ealth Sciences     |         | 3             |  |
| Course Number | Course Title  |                    |         | Cred          | lits   |
| PUBH 8001     | Doctor of Public Health Dissertation  |                    |         | 12            |  |
| Course Number | Course Title  |                    | Credits |               | Pre-Requisites   |
| EOHS 7204     | Organization of Work, Occupational Stress, and Health                                       |                    | 3       |               | EOHS 7300, BIOS<br>7200, PUBH 7201, or<br>by instructor<br>permission as the<br>pre-requisite for this<br>course |
|               |   |                    |         |               | course   |
| EOHS 7301     | Emerging Issues in Local, National and Global Environment                                   | al Health          | 3       |               |  |

| <b>Environmental &amp; Occu</b> | pational Health Sciences | Concentration Core Courses |
|---------------------------------|--------------------------|----------------------------|
|---------------------------------|--------------------------|----------------------------|

#### Epidemiology

The Doctor of Public Health with a concentration in Epidemiology is intended to prepare students for advanced leadership positions as epidemiologists. Students will gain the skills and knowledge essential to plan and conduct applied epidemiologic research as independent investigators.

| Course Number | Course Title  | Credits | Prerequisites                   |
|---------------|---|---------|---------------------------------|
| EPID 7201     | Advanced Epidemiological Research Methods I           | 3       | BIOS 7200                       |
| EPID 7202     | Advanced Epidemiological Research Methods II          | 3       | BIOS 7200                       |
| BIOS 7201     | Probability Theory                                    | 3       |                                 |
| BIOS 7202     | Statistical Inference                                 | 3       |                                 |
|               |   | Total   |                                 |
|               |   | 12      |                                 |
| Course Number | Course Title  |         | Credits                         |
| EPID 7000     | Field Experience in Epidemiology                      |         | 3                               |
| Course Number | Course Title  |         | Credits                         |
| PUBH 8001     | Doctor of Public Health Dissertation                  |         | 12                              |
| Course Number | Course Title  | Credits | Prerequisites                   |
| BIOS 7301     | Applied Statistics and Data Mining                    | 3       |                                 |
| BIOS 7302     | Advanced Categorical Data Analysis                    | 3       | BIOS 7201                       |
| BIOS 7303     | Advanced Survival Analysis                            | 3       | BIOS 7201                       |
| EPID 7203     | Principles of Surveillance and Disease Control        | 3       | EPID 5200, BIOS 5200, EPID 7202 |
| EPID 7300     | Epidemiology of Communicable Disease                  | 3       |                                 |
| EPID 7301     | Molecular Epidemiology, Biomarkers, and<br>Toxicology | 3       | EPID 7201, EPID 7202            |

#### Epidemiology Concentration Core Courses

# **DrPH Course Descriptions**

#### Core Courses:

#### Each course represents 3 credits for a total of 12:

#### BIOS 7200: Quantitative Research Methods for Public Health Practice (3)

This doctoral course is designed to illustrate mastery of concepts and proficiency in the principles of epidemiology and biostatistics used for public health research. By the end of the course, the successful student should have attained a sound understanding of these methods and a solid foundation for further study.

#### PUBH 7201: Study Design in Public Health (3)

Study Design in Public Health Practice provides a review of methodology for conducting research in public health. We will cover both quantitative and qualitative research approaches. At the end of the course, students will demonstrate understanding of all major types of study designs used in public health research, and will have a working knowledge of how to identify and address potential biasing and confounding factors. We will also cover methodology important for the implementation of studies, including questionnaire design and measurement.

#### HPMG 7200: Public Health Management and Ethics (3)

The Institute of Medicine has called for a public health leadership that "defines vision, focuses effort, optimizes resources, builds and sustains systems, facilitates communication and learning, fosters productive relationships and attends to success, planning, and knowledge transfer." This seminar seeks to equip students with these public health management and ethical skills across a wide range of practice settings. Emphasis will be given to cross-disciplinary approaches to addressing and resolving public health problems through the development of key management and leadership skills. Special attention is given to ethical considerations in strategic planning, decision-making and problem solving, and the requirements governing the conduct of human research. Course content will be a mix of case studies and in-class presentations from students and invited guests.

#### PUBH 7200: Public Health Policy and Politics Seminar (3)

This course will go beyond the basics of health policy (actors, processes, etc.), and require students to apply their knowledge of the framework of the American health care system toward the end of evaluating contemporary developments. Students will analyze different models of reform, and discover how the health care system comes to reflect the values prioritized by a given nation. The course will explore in systematic fashion how local, state, and federal bodies work in concert to collectively comprise what we call the American health care system, as well as the ways in which actors fail to work together--uncovering the 'asystematic' aspects of our country's arrangements in the arena of health care. Students will also learn how health care providers, specifically, relate to the broader system, and some of the ways in which they can hope to effect change.

#### COMMUNITY HEALTH SCIENCES CORE COURSES (12 credits)

## CHSC 7201: Qualitative Research Methods for Public Health Practice (3)

This course offers advanced training in qualitative methods and analysis. Students will explore a range of qualitative research methods, including participant observation, unobtrusive methods, in-depth interviewing, and focus groups. They will carry out hands-on observation and interviewing during the course and will receive feedback from the instructor and other class participants. Research design issues will be discussed along with the use of qualitative data for health education theory building and program planning. Readings draw on different methodological guidelines, including Grounded Theory approaches.

## CHSC 7202: Methods of Community Intervention and Research (3)

Active academic and community partnerships are vital for improvements in community health and for reducing health-related disparities. This course will review key methods for engaging in community-based research, will involve students in active discussion and debate regarding current issues in the conduct of community-based research, and will provide an interdisciplinary perspective on how these approaches are applied across public health disciplines.

## CHSC 7203: Program Evaluation: Theory, Practice, and Research (3)

This course focuses on the application of program evaluation models and approaches. Addresses formative and summative evaluation strategies for health promotion programs, and incorporates decision-making surrounding the use of quantitative and qualitative methods of assessment. Examines the planning of evaluation, construction of instruments and strategies of measurement, and methods of effective data collection, management, and analysis.

# CHSC 7204: Health Promotion Seminar (3)

This course is an in-depth exploration of topics and issues related to the design and conduct of health promotion programs and accompanying evaluations, with a focus on programs that seek to address disparities in health outcomes and public resource allocation. Students will develop expertise on a specified topic of interest, will develop a detailed multi-level analysis of a specific risk factor, and will critically analyze the evidence-base for programs designed to reduce identified risk factors.

#### FIELD EXPERIENCE IN COMMUNITY HEALTH SCIENCES (3 credits)

CHSC 7000: Field Experience in Community Health Sciences (3)

Students will gain in-depth work experience through supervised internships relevant to the student's career plans. The field practice is selected jointly by the student and the faculty advisor, and will involve opportunities to apply skills related to program planning, implementation, and/or evaluation as applied to behavior change efforts.

## **COMMUNITY HEALTH SCIENCES ELECTIVE COURSES**: 2 elective courses, at 3 credits, each for a total of 6 credits CHSC 7300: Models and Theories of Health Behavior (3)

The course will involve an examination and critique of current and evolving models of health promotion and behavior change. An emphasis on this course will be the selection and utilization of health behavior theories to the design, measurement, and evaluation of public health interventions. Students will gain skills in the application of major individual, social, and community-level approaches to behavior change.

# CHSC 7301: Psychosocial and Behavioral Epidemiology (3)

This course provides an in-depth exploration into the social, psychological, and behavioral issues that influence patterns of health and health care delivery. The focus is on the integration of the biomedical, social, psychological, and behavioral factors that must be taken into consideration when public health initiatives are developed and implemented. The course will also include the application of epidemiologic methods to the study of social, psychological, and behavioral influences on health, disease, and recovery/mortality. Students will explore in depth both micro and macro level determinants of a public health issue and explore themes of social justice as it pertains to public health disparities.

#### Prerequisites: BIOS 7200

# CHSC 7302: Health Communication Theory and Practice (3)

This course will examine how health communication theory, marketing, and theories of behavior can be utilized to construct health communications that have the greatest impact on public health. Students will gain exposure to the practice and theory involved in communication design through critiques of health promotion interventions and campaigns and through development of communications to address public health issues.

# CHSC 7303: Survey Research Methods (3 credits)

This course is intended to provide doctoral students with a sound basis in the design and conduct of public health surveys, particularly those that include measurement of behaviors and social and psychological constructs. Doctoral students will be engaged in an in-depth analysis of theory and research as it relates to survey design, and will apply lecture content and reading in the course to the development of a survey proposal and survey instrument.

# CHSC 7304: Culture, Class, and Ethnicity in Health Promotion (3)

This course is a series of experiential training exercises to develop skills for practitioners who will conduct interventions or research with target populations of various cultures, social classes, and ethnicities. Emphasis is on critical awareness of the practitioner's own values and presumptions, historical experiences of abuse in public health programs, in-depth understanding of the values and perspective of target populations, and the development of leaders from within the target population.

## CHSC 7305: International Case Studies in Community Health (3)

This course will explore topics and issues related to public health in communities in selected countries through in-depth analysis and discussion of case studies. Themes and countries covered during each course may vary in different semesters.

# CHSC 7306: Advanced Seminar in Urban Health (3)

The world has experienced unprecedented urban growth in the last decades. By 2050, it is projected that 70% of the world will be living in cities. This course is an in-depth study of cities as complex environments where common public health issues require more nuanced, multi-disciplinary, multi-sector frameworks and approaches. Course readings are chosen to encourage a critical discussion of the social determinants of health unique to urban settings from a demographic, geo-spatial and urban sociological perspective, highlighting the relevance of urban form, demography, race/ethnic relations, and income inequality. It will explore the complexities of cities and implications for health through an analysis of several contemporary case studies including transnational healthcare for undocumented immigrants, the Dutch URBAN40 study on urban greening and health, and SUNY Downstate Vogue Theory, a sexual health promotion program designed for MSM youth of color. Students will develop expertise on a contemporary public health challenge of interest and critically apply evidence and urban social theory to the formulation of solutions to this challenge.

#### ENVIRONMENTAL & OCCUPATIONAL HEALTH SCIENCES CORE COURSES: Four courses of 3 credits each for a total of 12 credits

## EOHS 7202: Advanced Topics in Risk Assessment and Management (3)

This course reviews the core foundations of risk assessment including hazard identification, dose response, exposure assessment, and risk characterization and provides practical experience in the study of risk management. Students will have the opportunity to explore ethical challenges to public health practitioners in the field. Specific case studies will focus on risk management and communication issues in urban and immigrant populations.

Avaiable to DrPH-EOHS students only.

## EOHS 7203: Environmental Health Policy and Management Systems (3)

This course examines the social, political, and legal foundations of the policy and management of current environmental health issues. This course focuses on environmental and occupational health laws, regulations, and guidance concerning air and water pollution, pesticide and toxic chemical manufacture and use, worker protection, disposal of solid and hazardous wastes, and worker and community right-to-know issues. Students will gain an understanding of existing occupational and environmental health management systems and regulatory requirements. Through structured assignments and presentations students will assess local and international environmental and occupational health issues, environmental justice, workers compensation laws, and state/federal agencies in a systems framework.

# EOHS 7205: Safety of the Food Supply (3)

Substantial public health resources are devoted to assure that the food chain from American and imported venues are free from pathogens and toxic chemicals. There are strict governmental standards and mandates and delegated responsibility for enforcement. Food borne illness has severe economic costs and consequences for those affected and for those responsible. Epidemiologic investigations and root cause analysis provide evidence for corrective actions and deterrence to continue to provide a safe table.

# EOHS 7300: Advanced Topics in Occupational Health (3)

This doctoral course focuses on the advanced analysis of key current issues in occupational health, including limitations in current systems of injury reporting, proposals to revise the Occupational Safety and Health Act and the Mine Safety and Health Act and their regulations, the effectiveness of participatory action research methods, the effectiveness of behavioral safety programs, and the impact of a stressful work organization on risk of injury and disease. Students will also apply the basic methods of occupational epidemiology to the identification of occupational hazards and associated health effects. This course is designed for those pursuing leadership positions in occupational health or in closely allied fields.

Prerequisites: EOHS 5202, BIOS 7200, PUBH 7201, or by instructor permission as the pre-requisite for this course

#### FIELD EXPERIENCE IN ENVIRONMENTAL AND OCCUPATIONAL HEALTH SCIENCES:

#### EOHS 7000: Field Experience in Environmental and Occupational Health Sciences (3)

The field experience provides depth and reinforces the didactic core Doctor of Public Health coursework through structured field practice. It acts as a bridge to the dissertation research through application of research and practice methods learned in the core courses to urban and immigrant environmental and

occupational health problems in the local community. Under the guidance of the instructor and in collaboration with community environmental and occupational health project leaders, students will have a structured hands-on experience that will call upon core skills in survey/evaluation research, leadership, communication, monitoring, and health assessment.

#### ENVIRONMENTAL HEALTH SCIENCES ELECTIVE COURSES:

#### Two courses of 3 credits each for a total of 6 credits:

## EOHS 7204: Organization of Work, Occupational Stress, and Health (3)

This course provides an in-depth evaluation of current topics related to the health impacts of workplace psychosocial hazards and methods for reducing and preventing those health impacts. The application of public health principles and decision-making processes will be discussed in relation to the prevention of injury and disease, health promotion and protection of worker populations from workplace psychosocial hazards.

Prerequisites: EOHS 7300, BIOS 7200, PUBH 7201, or by instructor permission as the pre-requisite for this course

## EOHS 7301: Emerging Issues in Local, National and Global Environmental Health (3)

Examines current and emerging environmental health issues such as air and water pollution, energy usage, climate change, sanitation, urban poverty, pesticides, hazardous waste, economic globalization, food security, and war. This course will explore the connections between these issues and public policies in developing and developed countries alike as well as the implications for the health of urban and immigrant populations.

## PUBH 7501: Writing Scientific Papers (1-3)

Enables doctoral students to further develop skills in writing successful scientific paper, that is, papers that are accepted by peerreviewed journals. Confers skills in identifying and using online information sources. Informs participants on different publication options, including open source journals. Explains NIH requirements for notification and access. Through problem-based learning and review of successful scientific papers, conveys the elements of successful scientific papers, including formats, data presentation, citations and acknowledgements.

#### EPIDEMIOLOGY CORE COURSES:

Four courses of 3 credits each for a total of 12 credits

# EPID 7201: Advanced Epidemiological Research Methods I (3)

This course explores the nature of causal inferences in epidemiology, and the methods by which they may be determined. Most sessions involve student presentations of relevant examples from the epidemiologic literature to illustrate concepts and methods, followed by general discussion. Topics to be covered include assessing bias, confounding and interaction, dealing with threats to validity and issues of reporting and application of epidemiologic results.

#### Prerequisites: BIOS 7200

## EPID 7202: Advanced Epidemiological Research Methods II (3)

This course uses the SAS statistical software package to perform advanced quantitative methods used in the analysis of casecontrol studies and cohort studies. Students will acquire experience with the following types of data analysis: stratification, MantelHaenszel methods, survival and life tables, Kaplan-Meier methods, logistic regression, Poisson regression, Cox regression (proportional hazards), and generalized estimating equations (GEE).

#### Prerequisites: BIOS 7200

# BIOS 7201: Probability Theory (3)

This doctoral level course is designed to provide students with experience in applied probability theory, including axiomatic foundations of probability, independence, conditional probability, joint distributions, transformations, moment generating functions, sampling distributions, modes of convergence and their interrelationships, laws of large numbers, and the central limit theorem.

## BIOS 7202: Statistical Inference (3)

This doctoral level course is designed to provide students with experience in applied statistical inference, including probability theory and distributions, sampling theory, general principles of statistical inference, goodness of fit, probability distributions and statistical inference for small samples, and probability models and statistical inference for continuous bivariate random variables.

#### FIELD EXPERIENCE IN EPIDEMIOLOGY

#### EPID 7000: Field Experience in Epidemiology (3)

Provides depth to the core Doctor of Public Health by reinforcing the didactic core coursework through structure field practice and acts as a bridge to the dissertation research through application of research methods learned in the core courses to actual public health epidemiological practice.

Under the guidance of the instructor and in collaboration with governmental or community resources, students will have a structured hands-on experience. Examples of potential sites are: hospital departments of infection control or tumor registries; the New York State Department of Health Zoonoses Program; the New York City Department of Health and Mental Hygiene HIV Epidemiology Program. Students will be expected to write a written report on the experience and to make a professional presentation of their experience at the interdisciplinary Doctoral Departmental seminar.

#### EPIDEMIOLOGY ELECTIVE COURSES:

Two courses of 3 credits each for a total of 6 credits

# BIOS 7301: Applied Statistics and Data Mining (3)

This course covers a variety of topics in applied statistics and data mining methods including principles, applications, and computational tools. The focus of the course is on understanding the theory behind these methods and applying them to topics in epidemiology and biostatistics. Students enrolled in the course will use R, a free computer program that allow for implementation of the methods covered during the course.

# BIOS 7302: Advanced Categorical Data Analysis (3)

This course covers analytical techniques involved in the analysis of studies where subjects have been cross-classified by two or more categorical variables. Special emphasis will be on advanced problems related to epidemiology, public health, and medicine. Advanced topics will include significance versus magnitude of association; estimation of relative risk; matching cases and controls; effects, measurement, and control of misclassification errors; combining evidence from many studies; and logistic regression.

Students will be introduced to the SAS statistical package for the advanced topics covered in the course.

#### Prerequisites: BIOS 7201

## BIOS 7303: Advanced Survival Analysis (3)

This course covers the basic theoretical aspects and advanced applications of various models to analyze "time to event" data. Basic advanced concepts such as the survival function, hazard function, right and interval censoring, and common nonparametric and parametric methods and models for analyzing survival data will be covered. The proportional hazards (PH) model with fixed and time dependent covariates, the stratified PH model, sample size calculations, and regression diagnostics for survival models will also be covered. Students will be introduced to the SAS statistical package for the advanced topics covered in the course. Prerequisites: BIOS 7201

# EPID 7203: Principles of Surveillance and Disease Control (3)

Public health surveillance is the continuous systematic collection, analysis, and interpretation of data essential to the planning, implementation, and evaluation of public health practice. Success depends upon the timely dissemination of these data to practitioners trained in interventions that prevent and control disease. This course reviews the major epidemiological surveillance programs, such as the National Notifiable Diseases Surveillance System, and newer approaches like syndromic surveillance. Students will have hands-on experience in utilizing selected datasets, and will be expected to demonstrate competence in the accessing and management database systems.

Prerequisites: BIOS 5200, EPID 7200, EPID 7202

# EPID 7300: Epidemiology of Communicable Disease (3)

This course reviews the use of epidemiologic methods in the assessment of selected communicable diseases of national and international importance. Students focus on methods of transmission, the role of surveillance, and methods of control and prevention. Specific disease examples to be covered will include tuberculosis, HIV, legionellosis, SARS, influenza, measles, Lyme disease, syphilis, as well as nosocomial, food-borne, and enteric infections. The principles of controlling antibiotic-resistant organisms will receive special attention. Students use case studies to practice the skills necessary for an outbreak investigation and other common procedures in this field.

# EPID 7301: Molecular Epidemiology, Biomarkers and Toxicology (3)

This course presents the techniques used in genetic and molecular epidemiology. Emphasizes the scientific basis of molecular epidemiology and provides examples of the application of molecular biology, analytical chemistry, and toxicology to the study of chronic disease etiology and its public health application. Topics to be covered include fundamental concepts of genetics; study designs and methods of statistical analysis used to evaluate the role of genetic inheritance in the occurrence of human disease; techniques to determine the location of the gene(s) and allele responsible for a disease; ethical implications of genetic research and databanks; common genetic diseases and their control; and use of genetic and molecular techniques in human exposure assessment.

Prerequisites: EPID 7201, EPID 7202

## EPID 7302: Cancer Epidemiology (3)

This course reviews the concepts and methodological issues in epidemiologic studies of cancer etiology and control. Students learn the molecular and cellular basis of cancer, the role of experimental studies in assessing human risk, the classification and nomenclature of human cancer and the morphology, as well as the natural history and etiologic importance of precursor lesions.

Students will examine in depth a variety of types of cancer of public health significance and discuss the role of public health practitioners in cancer control and cancer screening.

## EPID 7303: Chronic Disease Epidemiology (3)

This course focuses on the epidemiologic concepts and methods appropriate to the study of chronic (mostly non-infectious) diseases and diseases of unknown etiology. Students will compare the approaches in descriptive, analytic, and experimental epidemiology for chronic disease with those for acute infectious diseases. Students will develop an extensive understanding of the epidemiologic, etiologic, pathophysiologic, and clinical features of important prevalent and emerging chronic diseases, including cardiovascular diseases, diabetes, arthritis, chronic obstructive lung disease, neurologic disorders, and mental illness. The class will examine risk assessment and applied epidemiologic methods to prevent or limit specific chronic diseases.

#### **Doctor of Public Health Dissertation**

#### PUBH 8001: Doctor of Public Health Dissertation

The Doctor of Public Health dissertation is a twelve-credit experience extending, on average, over a three-year period. The topic of the dissertation must address a significant public health problem in the student's specialty area.

#### **Dissertation Development**

The student, having advanced to candidacy, has one (1) year to develop his/her dissertation proposal and defend it before his/her dissertation committee and the public. The proposal must contain the following elements:

- Study Aims and Hypothesis
- Relevant Review of the Literature
- Design and Methods complete with statistical analysis
- Protection of Participants
- Proposed Timeline

The dissertation must represent the original thinking and analysis of the student. It does not necessarily require the collection of new data; but it must demonstrate that the candidate is capable of independent scientific analysis at an advanced professional level.

#### Oral Presentation of Proposed Dissertation Topic: No credit

There will also be an oral presentation of the dissertation topic - no more than 30 minutes -- by the student to his/her dissertation committee and the public. The presentation will be followed by questioning from the student's dissertation committee and the public. The purpose is to ascertain that the proposed work is appropriate and that the student has the adequate knowledge of the topic and the skills to complete the work successfully.

# The Dissertation: PUBH 8001: Doctor of Public Health Dissertation

The Doctor of Public Health dissertation is a twelve-credit experience extending, on average, over a three-year period. The topic of the dissertation must address a significant public health problem in the student's specialty area.

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### The Dissertation:

Throughout the development, implementation, and evaluation of the dissertation project, the student should meet regularly with his/her dissertation chair (student's advisor). As necessary, the student should also meet with other members of his/her committee to review specific portions of the proposal as appropriate to their expertise. Periodic revisions should be circulated to all members of the committee upon approval of the committee chair. Revisions should be noted in a cover memo to the committee members such that they will be kept up to date.

When the study is deemed completed and ready, final approval must be received, in writing, from the chair of the dissertation committee with agreement from all members of the committee. This process must be completed at least one (1) month prior to the proposed date for the study defense. With the designated approval, the defense date will then be scheduled.

### The Defense

There are two (2) portions to the defense:

- Public presentation of the student's research, 30 minutes, with questions and comments from attendees, followed by
- Closed session with dissertation committee, and any members of the Doctor of Public Health Program faculty, to discuss any particular details of the dissertation and/or defense.

Note that the committee may either accept without change the student's study or, alternately, require additional clarification regarding key points of the study. The dissertation (study) achieves final approval when all members of the committee agree that the written dissertation and presentation have been satisfactorily completed. The student is strongly encouraged to prepare the study for submission to a peer-reviewed journal for publication.

# **Facilities for Instruction**

#### PUBLIC HEALTH ACADEMIC BUILDING

Downstate's Public Health/Academic building was completed in 2018. The building houses Downstate's School of Public Health administrative offices, classrooms and lecture halls for the College of Medicine and other academic units, and several floors of research labs. The architecture will reflect changing approaches to the teaching of medicine: classrooms will be designed to facilitate multidisciplinary instruction of small groups, as well as take advantage of new technology, including a simulation center.

#### **BASIC SCIENCES BUILDING**

The Basic Sciences Building houses the School of Graduate Studies, with space for research, education, and administrative functions. The facility supports basic and clinical research and is used by students in both the School of Graduate Studies and the College of Medicine.

The 541,000-square-foot facility has laboratories for both basic and clinical research, as well as offices for faculty and four lecture halls. The Basic Sciences Building gives students and faculty access to highly specialized research equipment, including, for example, a DNA sequencing facility, electron microscopy, computerbased gel documentation and image analysis, phosphorimaging, and a protein sequencing center.

# HEALTH SCIENCE EDUCATION BUILDING

The campus's Health Science Education Building (HSEB) houses classrooms, laboratories, a 500-seat auditorium, and the Medical Research Library of Brooklyn. Included in the HSEB are two floors of study carrels with lockable storage, which serve as "home base" for medical students during their first two years. The carrels are located in multidisciplinary laboratory sites. This arrangement fosters small-group learning. The carrels are equipped with power and data lines.

#### MEDICAL RESEARCH LIBRARY OF BROOKLYN

Downstate's library occupies three floors of the Health Science Education Building and is accessible from the 395 Lenox Road entrance.

The 24/7 Library Information Commons provides comfortable seating for individual and groups; computers and ports, power, printing, and refer- ence service while staff are present.

#### Resources

The nucleus of the library was formed when the Academy of Medicine of Brooklyn and SUNY Downstate merged in the 1960s.

The collections date from the early eighteenth century, and include an archive of historical materials relating to the history of medicine in Kings County and at the Long Island College Hospital, SUNY Downstate's predecessor institution. These materials are cataloged and the holdings may be searched on the publicly accessible web site: library.downstate.edu.

The library's website also provides access, both local and remote, to many other resources, including a significant number of electronic journals in fulltext. Other resources include FirstSearch, CINAHL (Cumulative Index to Nursing and Allie Health Literature), PubMed, InfoShare, NetLibrary, Info-Trac, and Lexis-Nexis. Remote access is validated through a proxy server.

All computers within the library are connected to the Internet. The library supports wireless connectivity to the Internet, and appropriately configured laptops may be checked out at the Access Services desk for two hours of inhouse use.

#### Services

 Access Services requires you to complete registration in the library's management system in order to take outmaterials from the library's collections. This unit also maintains the General Reserve collection, the Special Reserve, which is coursespecific and may be available electronically as an E-Reserve item on the library web page. Group study rooms are also available from this unit.

- Inter-Library Loan will procure materials that are not available in the library. These materials may be requested through Illiad, which is found on the library's web page. Articles requested may be delivered in pdf format to clients' desktops.
- The Reference unit will conduct generic orientations or customized orientations upon request (718-270-7453). Course- or program-specific orientation or classes may be arranged. Librarians are on duty five days a week, and an online reference chat room that allows a real time chat with a librarian is also available along with email reference. Print reference resources are available on the lower floor of the library.
- The Institute of Evidence-Based Practice serves all of the colleges, as well as the residency programs through curriculum-integrated sessions. The library has created internationally recognized EBM tutorials, which are available on the library's webpage. Customized instruction is available.
- Learning Resource Services, located on the lower level of the library, comprises the Advanced Learning Resource Center (ALRC), Classroom Services, and the Audiovisual unit.
   A wide array of computer software and audiovisual programs is available.

The ALRC has over 100 seats configured in group and individual viewing rooms, carrels, and three computer-training rooms. Computer applicationtutorials are available on CDs.

 Classroom Services provides room scheduling and audiovisual services, as well as technical assistance to operate audiovisual equipment such as overhead, slide, and video projectors. Student requests for space and equipment are done through the Student Center. Reservations are preferred by fax (270-7471) or online submission: classrooms.downstate.edu.

 Self-service photocopiers or scanners are available on all floors of the library. Copies for a fee may be made if a print services card is used. Fee- based photocopying services are also available (see Access Services desk for details).

 Printing is available via networked printers located on all floors of the library and also in the ALRC. For more information please go to the library's website at: library. downstate.edu.

# **University Services**

Current and more detailed information appears annually in the Student Handbook.

#### BANKING

Automated teller machine (ATM) services from JP Morgan/Chase are located in the main lobby of the Basic Sciences Building, near the 450 Clarkson Avenue entrance. A customer-service window adjacent to the ATMs is open Wednesdays, 10 am-3 pm (day and time are subject to change). Students are eligible for free checking during their first year, with no minimum balance requirement.

#### BOOKSTORE

The University Bookstore, operated by the Faculty Student Association, is located on the main level of the Student Center. It carries books, stamps, office supplies, clothing, and novelty items. Hours: 9:30 am–5 pm on Tuesday, Wednesday, and Friday, and 9:30 am-6 pm on Monday and Thursday. For more information, call 718-270-2486 or go to www.downstate.edu/bookstore.

#### BURSAR'S OFFICE

Cashier's window hours: 10 am-4 pm, Monday, Tuesday, Thursday, and Friday 10 am-5:30 pm Wednesday

TheBursar'sOffice is responsible for reporting and dispersing to the state comptroller all monies received at SUNY Downstate, except hospital patient receipts. These collections include tuition, dormitory rents, registration deposits, library fines and fees, and dormitory damage fees. The office also disperses all checks made available through all federal loan and scholarship programs, state scholarships and TAP awards, local Center loans and scholarships, and guaranteed loans.

The Bursar's Office accepts Visa, MasterCard, and the Discover cards for payment of tuition, fees, and dormitory-rent charges. The deadline for registration and tuition payment (to avoid late charges) is generally the last business day before the first day of classes in that semester.

Returning or continuing students who wish to change their out-of-state residency status to in-state residency for tuition purposes must file the appropriate application and supporting documentation with the Registrar's Office two weeks prior to the mailing of the subsequent semester's registration packet (approximately one month prior to the start of the semester). Therefore, change of status from out-of-state to in-state must be initiated six weeks prior to the date of registration for the next term. Registration dates are indicated on the academic calendars.

#### CHAPLAIN SERVICES

The Office of Pastoral Care of University Hospital of Brooklyn offers religious and other support services to patients, families, staff, and members of the Downstate community. The Interfaith Chapel (Room A1-347, University Hospital) is open 24 hours a day for use by all. Times and dates of religious services are posted on the chapel bulletin board. For more information, call (718) 270-2594; in an emergency, (718) 270-2121.

#### CHILDREN'S CENTER

Located at 440 Lenox Road, this is an on-site day-care center that offers developmentally appropriate early-childhood education for children from age eight weeks to five years. Its director and staff are fully qualified to teach young children. The Children's Center has a sliding fee scale, and there is a \$20 non-refundable application fee. Center hours are 7:30 a.m. to 5:30 p.m. For more information call the Children's Center, (718) 221-6165.

#### FACULTY-STUDENT ASSOCIATION

The Faculty Student Association (FSA) provides many student services as well as business and accounting services to campus members. It is an independent, not-for-profit IRS 501<sup>©</sup>3 corporation with a board of directors comprised of administrative, faculty, and student representatives. FSA administers all

Student Activity Fee finances and Student Health Insurance. It operates the University Bookstore, Hospital Gift Shop, ATM Banking, Café 101, and vending and laundry machines.

Goto:www.downstate.edu/FSA.

FSA has partnered with Zipcar to provide car rentals. Two Zipcars are available in the State Garage at discounted rates. Go to: www.downstate.edu/zipcar.

#### FOOD SERVICES

A cafeteria, open to students, faculty, staff, and visitors, is located on the first floor, between the Basic Sciences Building and University Hospital.

The Faculty Student Association oversees Cafe 101, a catering facility located in Room 2-20 of the Student Center. Cafe 101 offers a special catering menu for student club-funded events.

Go to: www.downstate.edu/cafe101.

#### OFFICE OF DIVERSITY AND INCLUSION

The Office of Diversity and Inclusion ensures compliance with federal and state nondiscrimination laws and regulations:

- Title VI and VII of the U.S. Civil Rights Act of 1964 as amended. Prohibits discrimination on the basis of race, color, or national origin in admissions, access to courses of programs, and student policies.
- Title IX of the U.S. Educational Amendments of 1972. Prohibits exclusion from participation in, or denial of benefits, or subjection to discrimination on the basis of sex in any education program or activity receiving federal financial assistance.
- Section 504 of the Vocational Rehabilitation Act of 1973. Prohibits discrimination on the basis of physical or mental handicap in any federally assisted program or activity.
- · Age Discrimination Act of 1975. Prohibits discrimination on the basis of age in programs or activities receiving federal financial assistance.
- Americans with Disabilities Act of 1990 (Titles II-V) including Amendment Act of 2008. Prohibits discrimination on the basis of disability in public service and public transportation, public accommodations, telecommunications, and miscellaneous provisions.
- New York State Human Rights Law. Prohibits discrimination by educational institutions, based on age, race, nation- al origin, gender, sexual orientation, marital status, disability, and military status.

Students have the right to consult with the Office of Diversity and Inclusion if they believe they have been subjected to discriminatory treatment or behavior. For more information on how to file a complaint of discrimination, contact: Chief Diversity Officer Kevin Antoine, JD, (718) 270-1738 or 3058, or go to: www.downstate.edu/diversity

#### OFFICE OF STUDENT AFFAIRS

The Office of Student Affairs serves as a general help and information office to students in all five schools. Student health-insurance information, international students' immigration forms, and Commencement are only a few of the areas handled through this office. More information is in the *Student Handbook* and on the institutional website.

International Student Services Assistance is provided only for immigration forms, and only for matriculated F-1 students. J-1 students are assisted in the Department of Human Resources. Additional information is in the *Student Handbook*.

#### OFFICE OF THE REGISTRAR

The office is responsible for class schedules, registration, course selection, course adds/drops, grades, transcripts, certification of student status, certification of academic good standing, loan deferments, veterans' affairs, and the maintenance of all academic records. Current information and more detailed information is available on the institutional website (www.downstate.edu) and in the *Student Handbook*.

Current students may review their academic folders by requesting to do so and providing proper identification. It is usually possible to review the folder immediately upon request; however, it may be necessary to make an appointment and return the following day.

Progress reports of academic performance (grades) are available online to students in the School of Graduate Studies and the School of Public Health approximately four weeks after the end of each semester of attendance. Progress reports are available online to students in the College of Medicine at the end of the academic year.

Allow a minimum of two weeks for processing when requesting transcripts, completion of licensure forms, and certification. Overnight or express mail is available at student expense. Arrangements for an overnight mail envelope and prepayment of associated charges may be made through the Bursar's Office and SUNY Downstate Medical Center's mailroom.

Changes in local mailing address, including phone number, must be made online. Changes in permanent address must be reported promptly to the Office of the Registrar.

#### PARKING

#### State University Garage, Lenox Road between 34th and 35th Streets

Since parking at SUNY Downstate is limited, it has been divided as fairly as possible among faculty, staff, students, and visitors. Reserved parking privileges are available for handicapped individuals.

#### **Temporary Parking**

Students with a valid ID may park in the State Garage on Monday-Friday from 2:30 pm-5:30 am, and all day on weekends and holidays.

Cost: \$1 for the first 12 hours and \$1/hr or any part thereafter.

Cost without a valid ID: \$3/hour or any part thereafter.

For additional information, contact the Parking Office at 825 New York Avenue, 1st floor, Monday-Friday, 9am-4pm, 718-270-3163.

#### Parking Lot

Located at 404 Winthrop Street between Nostrand and New York Avenues, the parking lot is a non-state facility owned and operated by the HSCB Foundation, Inc. Parking privileges are available to SUNY Downstate employees and students who place their names on the waiting list in the Faculty Student Association Office located in the Student Center, Room 2-09, (718) 270-3187.

The parking lot is open Monday– Friday from 6 am–10 pm. It is closed on Saturdays, Sundays, and holidays. A limited number of transient parking spaces are available at a daily rate. Goto: www.downstate.edu/fsa/ parking.html

#### **RESIDENTIAL LIFE AND SERVICES**

Upon acceptance to SUNY Downstate, students are sent housing information and application forms by the Office of Admissions. For additional information concerning housing, write or telephone: Residential Life and Services

SUNY Downstate Medical Center 811 New York Avenue Brooklyn, NY 11203 Telephone: (718) 270-1466 Fax: (718) 270-1467 sls.downstate.edu/residential\_life Email: residentiallife@downstate.edu

A residence hall is a continually changing environment in which resident students can explore the varied relationships and lifestyles in the process of their development as well-rounded individuals. The residence hall is a place where students live, learn, and relax in an environment that emphasizes both individual freedom and community responsibility. Downstate's Residence Life Program is designed to enhance these experiences.

Two residence halls, located at 811 and 825 New York Avenue, accommodate approximately 400 students. Assignments for the academic year are made each summer on the basis of computerized lotteries. Students may upgrade their assignment as space becomes available during the course of the year. Upgrades are decided based on availability.

#### **Residence Hall Rooms**

Offered as a single or double occupancy. Each residence hall room contains a bed, desk, dresser, closet, and lamp for each occupant. Toilet facilities are shared with students in the adjoining room. Community shower rooms are provided for the occupants of the floor. Community kitchens are provided for residence hall occupants in various locations.

#### **Studio Apartments**

Offered as a single or double occupancy as well as for married couples and domestic partners. Each studio apartment contains a bed, desk, dresser, and closet for each occupant, plus a standing floor lamp. Each apartment contains a complete compact kitchen and private bathroom.

#### **One-Bedroom Apartments**

A unit for two individuals, with a separate bedroom for each student. Each one-bedroom apartment contains a full-size bed, desk, dresser, and closet, plus a standing floor lamp. The apartment also contains a complete compact kitchen unit and private bath. Assignments to one-bedroom apartments are based on a lottery held for all Downstate students.

#### **Off-Campus Housing**

The Off-Campus Housing Office provides interested students with information on available housing options outside of the residence halls. An off-campus housing list is maintained by the Housing Office as a service to Downstate students and staff.

Downstate employees do not inspect, approve or supervise any off-campus premises. Downstate does not become a party to any private landlord-tenant matters.

#### UNIVERSITY POLICE

The University Police Department maintains a proactive approach to reduction and suppression of crime on campus. More detailed information is published annually by University Police and in the *Student Handbook*.

- Officers are assigned to: • Entrances in each building
- Patrol each building
- · Booths that are located in areas of high pedestrian traffic
- Radio-equipped motor vehicles

Identification/Facility Access There are systems in place that are designed to ensure that persons entering Downstate are authorized to do so. I.D. must be worn on campus.

#### **Phones/Alarms**

A network of emergency (red) telephones is located throughout Downstate. In addition, a network of panic alarms is located in various places, including the corridors, laboratories, rest rooms, and on-call rooms. Both the red phones and panic alarms are linked directly with the University Police Department and are monitored 24 hours a day to ensure a quick response to any emergency.

#### Shuttle Service

To enable personnel who commute by public transportation to get to their points of departure safely, the University Police Department provides transportation to subway stations and bus stops. There is also a shuttle service to and from the offcampus parking facilities and Downstate. Call 718-270-2626 to request these services.

#### **Escort Service**

An unscheduled service designed to bring faculty, staff, and students to local destinations at off-peak hours. Call 718-270-2626 to request this service.

**Closed-Circuit Television System** A CCTV system monitoring the interior and exterior of the Downstate campus is recorded 24 hours a day by the University Police Department.

#### Perimeter Lighting

Additional high-intensity lighting has been installed on exterior areas of the campus in addition to that already provided by the City of New York.

#### Student Responsibilities

Isolation can occur almost anywhere on campus, depending on the time of day, day of the week, or specific building.

To avoid isolation, students should:

- · Walk and travel in groups, when possible
- · Use University Police escort and shuttle services
- Be aware that University Police monitors its telephone switchboard (x2626) 24 hours a day, and that red telephones have direct contact with University Police without dialing
- Be aware that University Police has emergency alarm buttons through- out University Hospital, the Basic Sciences Building, the Health Science Education Building, the Student Center, and dormitories which, if activated, University Police staff are dispatched to investigate.

**Residence Hall Security** Downstate has two residential buildings available for students. The following security and safety systems are currently inplace:

- · 24-hour coverage by University Police officers at 811 New York Avenue.
- · Service-desk coverage by professional and student staff (8:30 am-10 pm).
- · Electronically locked entrance doors. I.D. cards are swiped for access.
- · A panic alarm system on each floor (common areas) and in all public basement areas
- · Surveillance cameras in common areas, laundry rooms, and outside entrances.

#### **University Police Annual Report**

The Downstate Medical Center University Police/Public Safety Department prepares and publishes an annual security report that com- plies with the Crime Awareness on Campus Security Act, better known as the Clery Act. This report is available on line at www.downstate.edu/police/ report.html. Printed copies are available upon request from University Police Administrative Office, 450 Clarkson Ave, Box 1201, Brooklyn, NY 11203 or call 718-270-3161.



#### Judith H. LaRosa, PhD, RN

Interim Dean, School of Public Health Professor of Health Policy and Management PhD: University of Maryland, College Park

#### Pascal James Imperato, MD, MPH&TM, MACP

Founding Dean and Distinguished Service Professor of Public Health MD: SUNY Downstate Medical Center MPH& TM: Tulane University School of Public Health & Tropical Medicine

### Full-Time Faculty:

Aimee Afable, Assistant Professor, Community Health Sciences PhD: Tulane University School of Public Health & Tropical Medicine Post Doctoral Fellowship, University of California MPH: Tulane University School of Public Health & Tropical Medicine

Karen Benker, Assistant Professor, Health Policy and Management and Associate Dean for Community Public Health Affairs
MD: University of Southern California at
Los Angeles
MPH: Columbia University School of Public Health

**Denise Bruno**, Associate Professor, Community Health Sciences MD: University of Medicine and Dentistry of New Jersey MPH: Harvard University School of Public Health

**Barbara Delano**, Chair and Distinguished Service Professor, Community Health Sciences MD: SUNY Downstate Medical Center MPH: University of Medicine and Dentistry of New Jersey

Daniel Ehlke, Assistant Professor, Health Policy and Management PhD: University of Toronto MA: Queens University

Laura Geer, Chair and Associate Professor, Environmental and Occupational Health Sciences PhD: Johns Hopkins University MHS: Johns Hopkins University

Usha Govindarajulu, Assistant Professor, Epidemiology and Biostatistics Post-doctorate: Harvard University: School of Public Health PhD: Boston University MS: George Washington University

Megan Hall, Assistant Professor, Environmental and Occupational Health Sciences ScD: Harvard University MS: University of Connecticut BS: University of Connecticut **Elizabeth Helzner**, PhD, Assistant Professor, Epidemiology PhD: University of Pittsburgh

**Lori Hoepner, DrPH, MPH,** Assistant Professor, Environmental and Occupational Health Sciences DrPH: Columbia University School of Public Health MPH: Tulane University School of Public Health and Tropical Medicine

**Pascal James Imperato**, SPH Founding Dean, Dean Emeritus and Distinguished Service Professor MD: SUNY Downstate Medical Center MPH&TM: Tulane University School of Public Health and Tropical Medicine

**Michael Joseph**, Associate Professor, Epidemiology PhD: University of Michigan School of Public Health MPH: Yale University School of Medicine

Sergios-Orestis Kolokotronis, Assistant Professor, Epidemiology

PhD: Columbia University MPhil & MA: Columbia University Adv. Certif. in Environmental Policy: Columbia University BS: Université Paris-Sud XI

**Paul Landsbergis**, Associate Professor, Environmental and Occupational Health Sciences PhD: Columbia University EdD: Rutgers University

Judith H. LaRosa, SPH Interim Dean, and Distinguished Service Professor, Health Policy and Management PhD: University of Maryland MNEd: University of Pittsburgh

Simone Reynolds, Assistant Professor, Epidemiology and Biostatistics PhD: University of Pittsburgh, Graduate School of Public Health MPH: New York Medical College School of Public Health

**Carl Rosenberg**, Clinical Assistant Professor, Epidemiology and Biostatistics PhD: CUNY/Mt. Sinai School of Medicine MS: Pennsylvania State University

**M. Monica Sweeney,** Vice Dean for Global Engagement, Clinical Professor and Chair, Health Policy and Management MD: SUNY Downstate Medical Center MPH: Columbia University Mailman School of Public Health

Azure Thompson, Assistant Professor, Community Health Sciences and Health Policy and Management DrPH: Columbia University Mailman School of Public Health MPH: Columbia University Mailman School of Public Health

Michael Szarek, Professor and Chair, Biostatistics and Epidemiology PhD: New York University LaToya Trowers, Assistant Professor, Health Policy and Management EdD: Capella University MBA: New York Institute of Technology

**Tracey Wilson**, Professor, Community Health Sciences PhD: State University of New York at Albany

### **Adjunct Faculty:**

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# **State University of New York**

The State University of New York's geographically dispersed campuses bring educational opportunity within commuting distance of virtually all New Yorkers and make up the nation's most diverse system of public higher education.

The State University of New York's 64 campuses are divided into four categories, based on educational mission, the kinds of opportunities available, and degrees offered.

SUNY offers students a wide diversity of educational options: short-term vocational/technical courses, certificate programs, associate degree programs, baccalaureate degree programs, graduate degrees, and postdoctoral studies. SUNY offers access to almost every field of academic or professional study somewhere within the system some 6,688 degree and certificate programs overall. Students pursue traditional study in classrooms and laboratories or work from home, at their own pace, through such innovative institutions as the SUNY Learning Network and Empire State College.

SUNY's students are predominantly New York State residents, representing every one of the state's 62 counties.

SUNY students also come from every other state in the United States, from four U.S. territories or possessions, and 171 foreign countries.

SUNY enrolls 40 percent of all New York State high-school graduates, and has a total enrollment of nearly 468,000 students.

SUNY students represent the society that surrounds them. More than 21 percent of all students are minorities.

SUNY numbers more than 3 million graduates on its rolls. The majority of SUNY'salumniresides and pursues careers in communities across New York State, contributing to the economic and social vitality of its people.

SUNY is committed to bringing its students the very best and brightest scholars, scientists, artists, and professionals. SUNY campuses boast nationally and internationally recognized figures in all the major disciplines. Their efforts are regularly recognized in numerous prestigious awards and honors.

# **State University Campuses**

#### **University Centers**

University at Albany University at Binghamton University at Buffalo University at Stony Brook

#### **UniversityColleges**

College at Brockport College at Buffalo College at Cortland Empire State College College at Fredonia College at Geneseo College at New Paltz College at Old Westbury College at Oneonta College at Plattsburgh College at Potsdam College at Purchase

#### **Health Science Centers**

Health Science Center at Brooklyn (SUNY Downstate) Health Science Center at Syracuse (Upstate Medical University) Health Science Center at Buffalo\* Health Science Center at Stony Brook\*

#### **Colleges of Technology**

College of Technology at Alfred College of Technology at Canton College of Agriculture and Technology at Cobleskill College of Technology at Delhi College of Technology at Farmingdale College of Agriculture and Technology at Morrisville Institute of Technology at Utica (SUNYIT)

#### Specialized Colleges

College of Environmental Science and Forestry Maritime College College of Optometry

#### Statutory Colleges \*\*

New York State College of Agriculture and Life Sciences at Cornell University New York State College of Ceramics at Alfred University New York State College of Human Ecology at Cornell University

New York State School of Industrial and Labor Relations at Cornell University

New York State College of Veterinary Medicine at Cornell University

#### **Community Colleges**

Adirondack Community College at Glens Falls Broome Community College at Binghamton Cayuga County Community College at Auburn Clinton Community College at Plattsburgh Columbia-Greene Community College at Hudson Corning Community College at Corning Dutchess Community College at Poughkeepsie

Erie Community College at Buffalo, Orchard Park, and Williamsville

Fashion Institute of Technology at New York City Finger Lakes Community College at Canandaigua Fulton-Montgomery Community College at Johnstown Genesee Community College at Batavia Herkimer County Community College at Herkimer Hudson Valley Community College at Jamestown Jefferson Community College at Jamestown Jefferson Community College at Utica Monroe Community College at Rochester Nassau Community College at Garden City Niagara County Community College at Sanborn North Country Community College at Saranac Lake

Onondaga Community College at Syracuse Orange County Community College at Middletown Rockland Community College at Suffern Schenectady County Community College at Schenectady Suffolk County Community College at Brentwood, Riverhead, and Selden Sullivan County Community College at Loch Sheldrake Tompkins Cortland Community College at Dryden Ulster County Community College at Stone Ridge Westchester Community College at Valhalla

\*The Health Science Centers at Buffalo and Stony Brook are operated under the administration of their respective university centers. \*\*These operate as contract colleges on the campuses of independent universities.

#### **EDUCATIONAL RIGHTS\***

The Family Educational Rights and Privacy Act of 1974 protects the rights of students to inspect and review certain educational records and prohibits the nonconsensual release of personally identifiable information from such records, which is not "directory information." Students currently enrolled at Downstate may object to the release of certain categories of directory information pertaining to them by providing written notification to the Office of the Registrar of their college within 14 days following the first day of classes. The categories of directory information at Downstate are listed in the Student Handbook for more detailed information, see the Handbook.

- Name, address, telephone numbers, dates of attendance
- Previous institutions, major field of study, degrees conferred
- Past and present participation in officially recognized activities, student photo, date and place of birth

The failure of any student to object specifically to the release of certain or all categories of directory information with-in the time indicated is interpreted asapproval. Please see policy "Family Education Right and Privacy Act" in the *Student Handbook* for further information.

#### **EDUCATION LAW**

The following applies to students who are unable to attend classes on certain days because of their religious beliefs: Sect. 224-a. (New York State Education Law).

1. No person shall be expelled from or be refused admission as a student to an institution of higher education for the reason that he/sheis unable, because of religious beliefs, to register or attend classes or to participate in an examination, study, or work requirement on a particular day or days

2. Any student in an institution of higher education who is unable, because of his or her religious beliefs, to attend classes on a particular day or days shall, because of such absence on the particular day or days, be excused from any examination or any study or work requirements.

3. It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make available to each student who is absent from school because of his or her religious beliefs an equivalent opportunity to register for classes or make up an examination, study, or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to the said student such equivalent opportunity.

4. If registration, classes, examinations, study, or work requirements are held on Friday after 4:00 p.m. or on Saturday, similar or makeup classes, examination, study, or work requirements, or opportunity to register shall be made available on other days, where it is possible and practicable to do so. No special fees shall be charged to the student for these classes, examinations, study, or work requirements or registration held on other days.

5. In effectuating the provisions of this section, it shall be the duty of the faculty and the administrative officials of each institution of higher education to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of his or her availing himself or herself of the provision of this section.

6. Any student who is aggrieved by the alleged failure of any faculty or administrative officials to comply in good faith with the provisions of this section shall be entitled to maintain an action or proceeding in the supreme court of the country in which such institution of higher education is located for the enforcement of his or her rights under this section.

6-a. It shall be the responsibility of the administrative officials of each institution of higher education to give written notice to students of their rights under this section, informing them that each student who is absent from school, because of his or her religious beliefs, must be given an equivalent opportunity to register for classes or make up any examination, study or work requirements which he or she may have missed because of such absence on any particular day or days. No fees of any kind shall be charged by the institution for making available to such student such equivalent opportunity.

7. As used in this section, the term "institution of higher education" shall mean any institution of higher education, recognized and approved by the Regents of the University of the State of New York, which provides a course of study leading to the granting of a post-secondary degree or diploma. Such term shall not include any institution which is operated, supervised or controlled by a church or by a religious denominational organization whose education programs are principally designated for the purpose of training ministers or other religious functionaries or for the purpose of propagating religious doctrines. As used in this section, the term "religious belief" shall mean beliefs associated with any corporation organized and operated exclusively for

religious purposes, which is not disqualified for tax exemption under section 501 of the United States Code.

\* See the Student Handbook for a full description of student rights.

SUNY Downstate Medical Center reserves the right to alter the existing rules and regulations, and academic programs, as deemed necessary by the institution. SUNY Downstate Medical Center expressly reserves the right, whenever deemed advisable: (1) to change or modify its schedule of tuition and fees; (2) to withdraw, cancel, or reschedule, or modify any course, program of study, degree or any requirement or policy in connection with the foregoing; and (3) to change or modify any academic or other policy.

Essential changes of information in this Bulletin concerning new academic regulations, policies, or programs will be published in newsletters or other University publications. It is the responsibility of each student to ascertain current information that pertains to the individual's program, particularly with regard to satisfaction of degree requirements by consultation with the student's advisor, the student's program, the office of the student's dean, the Office of Student Affairs, the Registrar's Office, and other offices as appropriate. In preparing this Bulletin, every effort has been made to provide pertinent and accurate information; however, SUNY Downstate Medical Center assumes no liability for Bulletin errors or omissions.

The State University of New York Downstate Medical Center does not discriminate on the basis of race, sex, sexual orientation, color, creed, age, national origin, handicap, religion, marital status or status as a disabled veteran or veteran of the Vietnam era in the recruitment and employment of faculty or staff, in the recruitment of students, or the operation of any of its pro- grams and activities, as specified by Federal and State laws or regulations. Applications are encouraged and welcomed from New York State residents, out-of-state students, and from members of underrepresented minority groups. New York State residents receive preference for admission.

# **State University of New York Downstate Medical Center**

# SUNY DOWNSTATE MEDICAL CENTER

450 Clarkson Avenue Brooklyn, NY 11203

· College of Medicine

- · School of Graduate Studies
- · School of Public Health
- · College of Health Related Professions
- · College of Nursing

# WEBSITE

www.downstate.edu

# ADMISSIONS

College of Medicine (718) 270-2446 Fax: (718) 270-7592 medadmissions@downstate.edu

## **School of Graduate Studies**

(718) 270-2740 sgadmissions@downstate.edu

## FINANCIAL AID

(718) 270-2488 Fax: (718) 270-7592 financialaid@downstate.edu

# ADDITIONAL INFORMATION

Office of Minority Affairs (718) 270-3033 Fax: (718) 270-1929 oma@downstate.edu

Residential Life and Services (718) 270-1466 Fax: (718) 270-1467 residentiallife@downstate.edu

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