Graduate Academic Catalog

2020-2021

Yeshiva University I Katz School of Science and Health

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PROGRAM DESCRIPTIONS

YESHIVA UNIVERSITY

Yeshiva University is the world's premier Jewish institution for higher education. Rooted in Jewish thought and tradition, it sits at the educational, spiritual and intellectual epicenter of a robust global movement that is dedicated to advancing the moral and material betterment of the Jewish community and broader society, in the service of God.

In September 2017, Ari Berman was inaugurated as the fifth president of Yeshiva University. He succeeded Richard M. Joel, who was inaugurated in 2003, and Norman Lamm, who had held the office since 1976. President Berman's two other predecessors were Bernard Revel, president from 1915 to 1940, and Samuel Belkin, who served from 1943 to 1975.

Visit https://www.yu.edu for more information about Yeshiva University.

UNIVERSITY POLICIES

Equal Opportunity

Yeshiva University is committed to a policy of equal opportunity and nondiscrimination in admissions and all other facets of its educational programs and activities. The responsibility for the University's affirmative action/equal opportunity and unlawful harassment policy lies with all deans, chairpersons, department heads, directors, administrators, managers and supervisors in their areas of responsibility and requires the commitment of the entire University community.

If you have any questions relating to equal opportunity or affirmative action, or if you wish the University to pursue a possible violation of University policy, you should contact the University's Title IX Coordinator, Ms.

ACADEMIC POLICIES, STANDARDS AND EXPECTATIONS

Ac

When the numerical value is multiplied by the credit value of a course, the resulting figure is the number of quality points. The student's average is computed by dividing the number of quality points earned by the total number of credits completed with a grade of A through G. The average is truncated to the third decimal place.

Appeal of Final Grade

A final grade may be changed by the instructor only for a computational error or recording error. In these two instances, the instructor completes a Change of Final Grade Form and the respective program director signs to approve the change and will send to the Office of the Registrar.

If a student believes a grade is incorrect, he/she must first meet with the instructor. Should this meeting be unsatisfactory, and the student would like to officially appeal the grade, the student may next meet with the Program Director. The Program Director will review materials related to the grade appeal and make a final decision.

Prerequisites

In order to receive credit for an undergraduate prerequisite course, a student must have received a C or better in the course. With respect to a graduate prerequisite course, the student must receive a B or better in the course. However, individual programs may require higher grades. A course may not be taken if the student has not received the minimum grade required in a prerequisite course. The student must repeat the prerequisite course, or an acceptable substitution approved by the Program Director.

Transfer of Credit

No more than 9 credits towards the master's degree may be transferred from other institutions.

Any student who wishes to transfer credit from another institution must submit a Transfer of Credit Form to the Office of the Registrar. This form must be approved and signed by the Program Director. Students must also include an official tr

Directed Study

Students who need to take a course listed in the catalog during a semester in which the course is not offered may be permitted to take that course through directed study.

To request a directed study:

- The student must seek permission from the Program Director and work under the supervision of a faculty sponsor. The student will be responsible in finding a sponsor for their work.
- During the regular registration period for the semester in which the student plans to do the work, the student must submit an Application for Directed Study Form to the Office of the Registrar. The faculty sponsor must list required examinations and papers and describe the nature of the direct supervision of the student.
- The Program Director considers each application and must approve it before directed study work begins.
- At the end of the term, the faculty sponsor should submit a grade to the Office of the Registrar. The course is listed on the student's record with its regular number and title.

Except under the most unusual circumstances, a student may take only one directed study course per semester. Directed study may, in exceptional cases, be done during the summer. Regular per credit tuition is charged.

Directed studies are treated as regular courses and are counted as part of the student's regular workload. If the work is not completed, the student must withdraw within regular deadlines. If the work is not completed at the conclusion of the semester, the student may apply for an extension and, if approved, will temporarily receive a grade of Incomplete. See the "Grades" section for more information about Incomplete grades.

Withdrawal from a Course

Students may drop classes through MYYU from the start of the designated registration period until the "last day to

Degrees are conferred in September, January, and May each year. A student applies for a degree by filing an Application for Graduation Form in the Office of the Registrar. Students will not be eligible to receive a degree unless they have submitted the Application for Graduation Form by the appropriate deadline as published in the Academic Calendar.

Should the degree not be awarded at that degree date, a new application must be filed prior to the degree date deadlines thereafter until the degree is awarded. Graduation fees paid initially remain valid for two (2) years and need not be paid again unless more than two (2) years elapses between payment and award of degree.

Students are bound by the curriculum that was in effect during the first semester they enrolled in the program. Students are responsible for meeting regularly with their academic advisors and checking their unofficial transcripts to ensure they are on track to graduate.

Academic Distinction

To receive distinction at graduation students must be in the top 10% of their graduating class and have achieved a minimum grade point average of 3.8.

Diplomas

Diplomas will be mailed to the address students list on the Application for Graduation Form within eight (8) weeks of the degree date. The last name on the student's diploma must match the last name on the student's record at the School. Duplicate or revised diplomas can be secured under certain circumstances. The acceptable reasons for a duplicate diploma request are listed here: https://www.yu.edu/sites/default/files/legacy/uploadedFiles/Academics/Registrar/Forms/YC/Duplicate%20Diploma%20Request%20Form.pdf. More information is available on the Office of the Registrar website at www.yu.edu/registrar.

Records and Transcripts

Students may generate unofficial transcripts at no cost in the Office of the Registrar or online at https://www.yu.edu/registrar/registration Current or former students who want official transcripts should visit www.yu.edu/transcript, where they can find information about fees, regulations, and procedures governing the issuance of official transcripts.

No official transcript will be issued for a student unless the student's financial record with the University is completely clear. A student's official records are sent only in the form of a complete transcript. No partial records are sent. Transcripts list courses in progress without grades. Students who believe there is an error in their academic record (e.g., in a grade, average, credit value, or course) must promptly contact the Office of the Registrar (see www.yu.edu/registrar for contact information).

Change of Name or Address

A student who wishes to change either a first or last name on School records must file a Request for Change of Name on School Records Form in the Office of the Registrar. Students who change their home or local residences are required to notify the Office of the Registrar within 10 days by updating their addresses and phone numbers online at https://www.yu.edu/registrar/registration A student is responsible for all mail sent to the old address if his/her address has not been updated.

If the need for a leave of absence extends beyond 180 days – taken together or separately – the student must officially withdraw from the School. Students who wish to withdraw must submit an Application for Withdrawal from the School Form, available in the Office of the Registrar. The form should be signed by both the Program Director and the Dean and returned to the Office of the Registrar.

Please Note: Immigration regulations require that students in F-1 status register and attend school full-time every semester. Please contact the Office of International Students and Scholars (OISS) before dropping below full-time or if you are considering a leave of absence.

Official Withdrawal

If a student chooses to withdraw from their program, they must fill out the Official Withdrawal Form and submit it to the Registrar's Office. If the student is registered for courses at the time of withdrawal, they will be subject to refund amounts as outlined in the academic calendar. Based on the timing of the student's withdraw, the student may receive a W on their transcript. The school's academic calendar may be referenced for specific dates.

Students who are registered for courses at the time of their withdrawal will be subject to the tuition refund rates in effect on the date of their withdrawal. Before the student withdraws from a program, the student must contact the Office of Student Finance regarding deadlines for tuition reimbursement and to

Students are responsible for knowing how to quote from, paraphrase, summarize, and cite sources correctly. However, when a student has attempted to acknowledge a source but has not done so fully or completely, the instructor, perhaps in consultation with other faculty, administrators, or an academic integrity panel, may determine that the issue is Misuse of Sources or unsuccessful writing, rather than Intentional Misrepresentation.[1]

Penalties and Procedures for Violating Academic Integrity Standards

Accordingly, students who act in a dishonest manner by cheating on written exams or plagiarizing are subject to penalty under the following procedures.

Please Note: If a faculty member determines that a student unintentionally misused sources on an assignment, he/she may lower the grade on the assignment in question (including lowering to a grade of “F”). No additional penalty should be imposed.

Notification Process

Any member of the Yeshiva University community may initiate a report of cheating on a written exam or plagiarism. The complainant should report the incident immediately, and no later than 10 days after the incident occurred, and should submit an Incident Report Form to the applicable Program Director.

1. The Program Director will then submit a written copy of the charges (cheating or plagiarism) to the student no later than 10 days after the incident was initially reported.

person impartial body appointed by the Dean, including the Katz School Student Service Coordinator, a Katz School program director, a faculty member, and a student. A non-voting representative from the Office of the Registrar may also be present for the hearing.

The CASI Committee Chair will notify the student in writing of the date, time, and place of the hearing. The student can meet with the Katz School Student Advocate for further clarification on the hearing process. The student may bring written materials and witnesses, but no advocates or advisers (including parents and attorneys). The Committee will consider all the facts and circumstances, may ask for further information from the relevant parties, and will determine whether the student committed an academic integrity violation within 10 days after the hearing. The Committee will provide a written summary of the hearing and its findings along with its notify the Program Director, who will then convene a hearing of the CASI in accordance with the procedures outlined above.

SOCIAL MEDIA USE

Students are required to adhere to the Social Media Policy established by the University and outlined in the YU Student Technology Resources Use Handbook: https://www.yu.edu/sites/default/files/legacy//uploadedFiles/Offices_and_Services/Information_Technology/Home/Yeshiva%20University%20Student%20Technology%20Resources%20Use%20Handbook.pdf appeal to the committee. The committee will review all documentation and testimony and will notify the Program Director and the student of their decision to grant or deny an appeal or recommendation on disciplinary action on the issue.

4.

Every fall, Student Services host a new Graduate Student Orientation prior to the start of classes. Orientation is structured to help students find their way around campus, finish up registration and paperwork, access services, and meet with faculty. In addition, students will be invited to attend meetups where they can connect with new classmates and current graduate students in many different departments.

New York City Experience

Yeshiva University is located in the heart of New York City. To help students explore the cultural and educational opportunities in the city, the Katz School Student Services Office sponsors tickets to NYC events and venues for students. Past events include New York Philharmonic Ensembles, Harlem Globetrotters, The Phantom of the Opera, Madame Butterfly, and the New York Yankees.

Office of International Students and Scholars

International students and exchange visitors are an important part of Yeshiva University's vibrant community. If enrolled in a STEM specific degree program, international students may qualify for extended Optional Practical Training after graduation.

The Office of International Student and Scholar Services (OISS) provides international students and scholars with immigration support and assistance with cultural adjustment, to help you achieve your educational goals. The OISS also acts as a liaison with the U.S. Department of Homeland Security (DHS) to ensure University-wide legal compliance with government immigration regulations and reporting requirements. International students are encouraged to visit the following website for support with their immigration status as a student at Yeshiva University: https://www.yu.edu/student-life/resources/international/current-students.

Office of Student Finance

To be considered for financial aid each student must complete a financial aid application.

- For U.S. citizens and Eligible Non-Citizens, please submit the Free Application for Federal Student Aid FAFSA.
-

engage in research activities that further the University's mission an

PROGRAM DESCRIPTIONS

Course Descriptions

BTM 5100 Foundations of Biotechnology
Provides a top-level understanding of the interdisciplinary scientific foundations of biotechnology. Topics include the molecular foundations of biotechnology, molecular microbiology, receptor pharmacology, drug development processes, biotech process development and scale-up, drug approval and regulatory affairs, genomics, microarray analysis, proteomics, computational biology, molecular modeling, analytical biotechnology, bioterrorism, and biotechnology.

BTM 5200 Biotechnology Management
Provides an overview of the activities and knowledge required to lead and administer biotechnology and pharmaceutical companies. Topics include health technology assessment and cost-effectiveness analysis; personalized medicine, pharmacogenomics, and companion diagnostics; drug pricing and reimbursement; governmental payers; patents and intellectual property; and information in health care.

BTM 6100 Clinical Trials and Research Management

Provides an interdisciplinary, state-of-the-art scientific introduction of clinical trials and research management to biotechnology to students. Topics include: designing and managing clinical trials, trials documentation, pediatric trials, risk management, IRB and FDA guidelines for clinical trials, NIH and NSF grants management, clinical trials data management and protocols.

BTE 5XXX Technology Entrepreneurship

Provides an introduction to the critical factors of success for entrepreneurial ventures and examines intrapreneurship within existing companies. Topics include: innovation models, diffusion of innovations; growth-share matrix, identifying high value opportunities; developing a business plan; determining pricing and implementing an integrated marketing strategy; entrepreneurial leadership, innovation ecosystems and networks of innovation; hiring talent and managing incentives; financial management and acquisition of capital.

BTM 5700 Finance for Startups and Entrepreneurial Venture

Provides students with a foundation for making financial decisions in startups and entrepreneurial ventures. Topics include: basic accounting principles; financial statement analysis (income statements, balance sheets, and statement of cash flows); strategic planning, capital budgeting and forecasting; expectations of investors, methods of valuation, dilutive and non-dilutive sources of funding; developing investor pitches, negotiating term sheets; and evaluating exit strategies.

MAN 5580 Project Management

Most data analysis and visualization work is project-based, and successful data analysts are effective at managing projects and collaborating as members of project teams. This course teaches project management using several tools from the leading methodologies for managing software projects. The most effective project managers will combine methods ods s

MAN 5580 ear aecg M amnt

BTM 6999 Independent Study in Biotechnology Management and Entrepreneurship
This independent study course provides the student with the flexibility to learn more about a topic of interest outside of the formal course setting. The subject should be chosen in consultation with a faculty advisor who acts as the student's supervisor, and with the permission of the program director. The student is required to submit a course contract describing the course of study and its specific learning objectives. Course credit is determined in advance of the course, by the instructor with the approval of the program director.

Admissions Requirements

Candidates must possess a bachelor's degree from an accredited college or university and complete a one-on-one interview with the faculty. The interview is a chance to get to know the faculty and ask detailed questions about the fie

MS in Cybersecurity

Yeshiva University's MS in Cybersecurity is a STEM-approved 30-credit master's degree, focused on the technology and management competencies for planning, implementing, upgrading, monitoring, and auditing cybersecurity protocols and procedures. The degree is aligned with industry certifications: CISSP, CISM, and ISACA-CRISC, and teaches you state-of-the-art technologies and practices. You'll get hands-on experience with threat mitigation, detection, and defense. You will also have the opportunity to gain practical experience through internships, CPT and STEM OPT.

Program Director

- David Schwed – Program Director, MS in Cybersecurity

Curriculum and Degree Requirements

Yeshiva University's MS in Cybersecurity is a STEM-approved 30-credit master's degree, focused on the tec & BD

cross-cultural crisis communications functions. Students will also review the many crisis communication management tools in use today, including emergency notification systems (ENS), as well as other international standards and crisis management plans.

CYB 5600 Emerging Cys3g Cys3g Cys3g Cys3g Cys3g CBb]TJyts16/F2 9(y)-4i5 685.9 Tm0 g0 G[ )]TETQ EMC /P <MCIgingys3g Cyty ThF2

CYB 6450 Independent Study
This independent study course provides the student with the flexibility to learn more about a topic of interest outside of the formal course setting. The subject should be chosen in consultation with a faculty advisor who acts as the student's supervisor, and with the permission of the program director. The student is required to submit a course contract describing the course of study and its specific learning objectives. Course credit is determined in

MS in Data Analytics and Visualization

Yeshiva's Master's in Data Analytics and Visualization focuses on data management and "wrangling," data modeling and algorithm development, data interpretation, and data reporting. This is critical to learning the core to Data Science. The MS in Data Analytics and Visualization is ideal for highly motivated individuals who want to build the quantitative, design, and business skills needed to advance to leadership positions as business data analysts.

Program Director and Faculty

Our faculty are successful practice leads and technical leads on data analysis, data science, and business design teams at both top-tier organizations and high-growth start-ups. They share a passion for working with data to make their organizations and customers more successful, and a commitment to helping prepare the next generation of data analysts. You will benefit from working closely with them on complex data analysis projects that aim to solve real-world business problems.

- Andy Catlin – Director, MS in Data Analytics andVisualization

Curriculum and Degree Requirements

As you progress through the YU Katz School's 30-credit MS in Data Analytics and Visualization program, you will develop a work-ready portfolio of projects and deepen your understanding of the core principles, patterns, and practices of data analysis and visualization. To earn your degree, you must complete seven required foundational courses and nine credits of electives.

Sample Course Sequence

Semester 1	Semester 2	Semester 3
• Business Modeling and Data Analysis (3 credits) • Structured Data Management (3 credits) • Project Management (3 credits) • Visual Design and Storytelling (3 credits)	• Analytics Programming (3 credits) • Computational Math and Statistics (3 credits) • Elective (3 credits) • Elective (3 credits)	• Elective (3 credits) • Capstone (3 credits)

*Elective Courses:

- Talent Analytics, 3 credits
- Data Driven Organizations, 3 credits
- Information Architectures, 3 credits
- Data Science, 3 credits
- Data Product Design, 3 credits
- Internship, 1-3 credits
- Independent Study, 1-3 credits
- Special Topics, 1-3 credits

course, students will learn the key processes, measures, and tools that enable data-driven workforce analysis to deliver competitive organizational advantage.

DAV 6050 Data Driven Organizations
The best data analysis projects are implemented in the context of an organization's business model, culture, key strategic initiatives, and processes. Data analysts who understand these contexts are more likely to see their efforts lead to improved organizational processes and/or decision-making. This course examines three important organizational-level analytical frameworks and emphasizes using data, analysis, and experimentation within each of these frameworks. Students will also be introduced to centralized data warehouses.

DAV 6100 Information Architectures
Organizations combine data from many different sources, including spreadsheets, databases, and data warehouses. As the volume, variety, and velocity of data increases, more enterprise data is stored in cloud-based distributed data stores. In this course, students will learn to design, populate, and report on these enterprise data architectures.

DAV 6150 Data Science
Frequently, analysts use data to describe the current state of an organization. Data science extends the analyst's reach into the future. Data science has been almost exclusively the domain of people who have Science, Technology, Engineering and Math (STEM) degrees, and especially those with a quantitative background. Recent fast-paced tool development and abstraction now allow motivated data analysts to perform useful and rigorous predictive analyses using high level languages and their rich scientific ecosystems. This course will cover classification, regression, and clustering methods, and students will apply these methods in designing, modeling, and building model applications that use natural language processing and recommender systems.

DAV 6200 Data Product Design
Successful entrepreneurs and consultants create value. Data analysts who can work alongside or act as value architects create more organizational value, more quickly. Today, this means using data, analysis, and experimentation to better understand customer goals and preferences. In this course, students learn analytical frameworks for using data in the service of customer insight, customer development, value proposition refinement, and product development.

DAV 6300 Special Topics
This course provides the opportunity to offer boutique short-term courses on emerging phenomena, policies, processes, technologies, and techniques in data analysis and visualization. The expectation is that this will be an advanced class that requires an appropriate student project and deliverable in line with the number of credits awarded for the course.

DAV 6400 Internship
This course consists of an off-campus internship experience supervised by a staff person at the internship site and overseen by a faculty advisor. The internship site must be approved by the program director, and the overall duration of student work must be no less than 150 hours (based on a 3-credit course). At the start of the internship, the student and faculty advisor will jointly develop specific learning objectives tailored to the nature of the internship. Over the course of the internship, students will be required to submit weekly reflections, and at the end of the internship, students write a final paper that represents the culmination of the work performed.
*Students must be in good academic standing to apply for the internship class.

DAV 6450 Independent Study
This independent study course provides the student with the flexibility to learn more about a topic of interest outside of the formal course setting. The subject should be chosen in consultation with a faculty advisor who acts as the student's supervisor, and with the permission of the program director. The student is required to submit a

course contract describing the course of study and its specific learning objectives. Course credit is determined in advance of the course, by the instructor with the approval of the program director.

Admissions Requirements

Successful candidates must exhibit the potential to excel in this demanding field upon graduation and meet the

MS in Digital Marketing and Media

Course Descriptions

MAR 5100 Communications
Our method is tool-based and across the semester we will introduce and workshop six flexible and replicable tools to support a more radically human business communications and marketing. The tools will be workshopped within the context of our lectures and readings and supported by cases. We will include five new marketing clinics as topic area deep dives: 1. Integrated search / content marketing, 2. Real social, 3. CRM/1st party data, 4. Experience planning workshop and 5. Multi-touch attribution modelling.

The approach is decidedly learning-by-doing, with the group project and its three presentations being the vehicle for students to embrace and demonstrate their newfound capability for leveraging these tools, models and strategies in the service of creating their go-to-market campaign plan for their business – the semester-long group exercise and final deliverable.

MAR 5507 Consumer Behavior and Customer Relationship Management
Customer Relationship Management (CRM) has changed the conversation in consumer-focused marketing, and companies are successful when they use CRM to optimize the identification, acquisition, growth, and retention of desired customers. This course provides students with a practical understanding of the issues that affectB2C and B2B relationships, including t

DAV 5400 Analytics Programming
Code-based solutions can be richer, more accurate, and more flexible than those that rely on off-the shelf software and analytics packages. This course teaches the programming skills that data analysts need to prepare structured and unstructured data for downstream analysis. Students will use high-level programming languages to create rich data analysis workflows.

DAV 5200 Visual Design and Storytelling

MAR 5901 Independent Study
This independent study course provides the student with the flexibility to learn more about a topic of interest outside the formal course setting. The subject should be chosen in consultation with a faculty advisor who acts as the student's supervisor, and with the permission of the program director. The student is required to submit a course contract describing the course of study and its specific learning objectives. Course credit is determined in advance of the course, by the instructor with the approval of the program director.

MAR 5900 Internship
This course consists of an off

Course Descriptions:

MAT 5300 Introduction to Analysis. Real and complex number systems, elements of topology on the real line, rigorous treatment of limits, continuity, differentiation, and Riemann integration, introduction to metric spaces, pointwise and uniform convergence for sequences and series of functions, introduction to differential forms, introduction to Lebesgue integration.

MAT 5510 Functional Analysis. Banach and Hilbert spaces, linear functionals, Hahn-Banach theorem, dual spaces, linear operators, closed graph theorem, Riesz theory for compact operators, spectral theory, function and Banach algebras.

MAT 5401 Dynamical Systems. Qualitative theory of differential equations, bifurcation theory, and Hamiltonian systems; differential dynamics, including hyperbolic theory and quasiperiodic dynamics; low

OTD in Occupational Therapy

Occupational therapists (OTs) help clients gain greater independence and confidence in performing the tasks of living – improving their quality of life, health and wellness, and connection to community. Through clinical practice, education and research, and program and policy development, OTs advocate for clients' well-being—and support clients in advocating for themselves.

Semester 1	Semester 2	Semester 3
• Occupational Therapy Profession & Practice (3 credits) • Introduction to Doctoral Fieldwork I (1 credit) • Assessment & Screening I (3 credits) • Introduction to Scholarship and Research (2 credits) • Clinical Skills & Procedures (2 credits) • Anatomy and Human Movement (5 credits)	• Occupational Performance in the Older Adult Population (5 credits) • Skills Lab: Older Adult (2 credits) • Fieldwork I – Older Adult (1 credit) • Assessment & Screening II (2 credits) • Brain, Behavior and Occupation (3 credits) • Scholarship and Evidence-Based Practice I (3 credits) • Occupations in Practice through the Lifespan (2 credits) • Introduction to Doctoral Studies (1 credit)	• Occupational Performance in the

Course Descriptions

OTH 5100 Occupational Therapy Profession & Practice
This course is an introduction to the field of occupational therapy, including the history, philosophical beliefs, areas of practice, and roles of practitioners. The focus of the course is on developing an awareness of professional organizations, ethics, and values with an emphasis on the Occupational Therapy Practice Framework (OTPF2).

OTH 5101 Introduction to Doctoral Fieldwork I
This course is an introduction to the field of occupational therapy, including the history, philosophical beliefs, areas of practice, and roles of practitioners. The focus of the course is on developing an awareness of professional organizations, ethics, and values with an emphasis on the Occupational Therapy Pa actice FrameaaoThan n g ty ,5iiScadC.64086.10 Tw

This course provides an in-depth analysis of the occupational therapy assessment process over the lifespan. It focuses available to clients.

OTH 5400A Occupational Performance in the Child and Adolescent Populations
This course is an introduction to occupational therapy with children and adolescents. It focuses on occupational behavior, explores developmental theories, occupational therapy frames of reference, and apply it to physical and psycho-social conditions typically seen in children and adolescents.

OTH 5400B Skills Lab: Children and Adolescents
This course incorporates hand-on learning experiences and development of skills based on the knowledge gained in the Occupational Performance in Children and Adolescents course. Students will explore application of occupational therapy theory use in the process of evaluation and intervention, models of practice, and frames of references towards the conditions typically seen in the children and adolescents.

OTH 5401 Fieldwork I – Children and Adolescents
This course provides opportunities for observation and participation in various aspects of the occupational therapy process during a full-time one-week children and adolescents Level I fieldwork experience. Students will be able to observe evaluations and interventions performed on adults with a variety of diagnosis in a variety of settings.

OTH 5402 Doctoral Fieldwork II
This course will emphasize information that has been covered in the occupational therapy curriculum to prepare the student for Fieldwork Level II: Therapeutic use of self; applying theoretical knowledge and evidence-based principles to the clinical situation; time management etc.

OTH5403 Preparatory Methods II
This course is a continuation of OCC 5303 and focuses on methods and techniques used by the occupational therapist to prepare the client for function/occupational performance: Physical agent modalities and splinting.

OTH 5404 Occupational Wellness
This course examines the relationship of occupation to health, well-being, participation; critical thinking about lifestyle factors influencing occupational engagement and wellness in occupational therapy practice.

OTH 5405 Leadership and Advancement in Practice
This course will cover information on how to provide effective occupational services: the role of the occupational therapy manager; running a business/department/program; leadership; maintain standards; use evidence; understand policy; and prepare next-generation leaders. It will foster professional development in leadership, management, and advocacy.

OTH 5500 Preparation for Doctoral Professional Practice
Using a "mock" format and case studies, students will have the opportunity to interview, apply appropriate screening and evaluations, develop occupation-based intervention, and discharge plans. Students will also have to apply knowledge about payment systems in different settings; admission criteria; documentation requirements, and billing.

OTH 5601 Fieldwork II-B
This course pro

OTH 5700 Capstone Project II

This course will build upon work from the first capstone course OCC 5600 Capstone Project I. The student will continue work on the project proposal utilizing one of the following modes for implementation: specialized practice, program development, education, leadership, administration, and advocacy.

OTH 5701 Capstone Experience I

The Capstone Experience internship provides students with the opportunity to synthesize advanced occupational therapy knowledge, utilize evidence-based knowledge, and grow professionally in a focuasowled

Admissions Requirements

MA in Physics

MA in Physics students can focus their studies in two ways: Academic or Industrial. With an academic focus, students build strong credentials for applying to top PhD programs in physics and engineering, and to increase the chances of securing full financial support in those programs.

With an industrial focus, students develop strong tools to transition into high-end industrial jobs in the STEM field. In addition to taking applied physics and engineering courses from the academic track, students may take up to 6 credits in mathematics, business or

MS in Quantitative Economics

Sample Course Sequence

YEAR 1 – FALL	YEAR 1 – SPRING	YEAR 1 – SUMMER
• Mathematics for Economists (3 credits) • Mathematical Statistics (3 credits) • Macroeconomics I (3 credits) • Microeconomics I (3 credits)	• Econometrics (3 credits) • Macroeconomics II (3 credits) • Microeconomics II (3 credits) • Elective 1 (3 credits) * • Elective 2 (3 credits) *	Summer 1 •

Course Descriptions

ECON 5101 Microeconomics I
This is the first course in the microeconomics sequence for the Master's in Quantitative Economics. The purpose of this course is to build a solid background in microeconomic theory. This will be done by giving you the core foundations of microeconomic theory and solidifying these with selected examples. The main topics we will cover include Choice Theory, Consumer Theory, Producer Theory, Uncertainty, General Equilibrium, and Mechanism Design.

ECON 5102 Microeconomics II
The purpose of this course is to introduce you to the strategic foundation of microeconomics from a theoretical perspective. It presents the basic non-cooperative game theory by developing the analysis of static and dynamic games. It proposes an application of game theory to oligopolistic competition. It finally provides a solid introduction to the market failure induced by asymmetric information (adverse selection and moral hazard).

ECON 5103 Macroeconomics I
This is the first course in the macroeconomics sequence for the Master's in Quantitative Economics. Research in quantitative macroeconomics over the last 70 years has brought us important progress in understanding why countries' economies grow, why they experience booms and recessions, and how different countries' economies are linked. Practicing macroeconomists, both in research, in government, in multinational organizations, and in business firms use these models to organize their thinking about these topics. However, there is still plenty of room for work since these models are highly imperfect in many ways. Therefore, the focus of this course will be to learn the basic models of growth and business cycles well enough to understand how to work with them and to understand what they explain convincingly and in what dimensions they fail.

ECON 5104 Macroeconomics II
This course is the continuation of Macroeconomics I. That course introduced the basic tools of neoclassical macroeconomic analysis: Growth Theory and the Stochastic Growth Model otherwise known as Real Business Cycle (RBC) Model. This course focuses on the applications of these tools, with an emphasis on departures from the complete markets, frictionless approach. The course will focus on four types of frictions widely seen to play an important role in macroeconomic analysis: Sticky Prices, Search, Financial Frictions (from moral hazard), and adjustment costs in consumption and investment.

ECON 5110 Econometrics
This course is the second of a two-semester graduate level study of the theory and practice of econometrics. The course assumes a working knowledge of concepts of econometric analysis. The objective is to work through a common set of principles, to formulate the theoretical underpinnings of various models, to study the workings of many econometric models, to be able to recognize variants of existing models, to develop variations of existing models that fit particular research problems. Hence, the use of MATLAB is going to be an integral part of the course.

ECON 5112 Financial Economics
This course provides an overview of the theory of financial markets from an economic perspective. The major conceptual tool that we will use to study these phenomena is the notion of economic equilibrium. The course is essentially divided up in two parts. In the first, we will build our understanding of the role of financial markets in hedging and insuring participants against risks. In the second, we will study the efficiency properties of financial markets, and stress the perverse equilibrium effects that less-than-perfect financial markets can have: how vulnerable they may be to self-fulfilling prophecies and (ir)rational exuberance; the possibility of financial crises, in particular of bank runs, as self-fulfilling prophecies; and whether or not financial markets transmit and spread information that some traders have privately acquired on companies, currencies and other events. Our analysis of finance uses the modern theory of microeconomics. It aims at constructing (relatively) simple mathematical models to study the welfare properties of financial markets, and the implications for asset prices.

ECON 5115 Market Design
This course introduces basic results in market design, a subfield of microeconomic theory where researchers propose desirable and often practical solutions to allocation problems in reality. Due to such a practical nature of this topic, students should become able to propose appropriate solutions by themselves to various allocation problems.

ECON 5201 Mathematics for Economists
This course covers some basic mathematical techniques for economists. It focuses on the theory and applications of optimization in both static and dynamic settings. It also introduces fixed point theorems that are fundamental for general equilibrium analysis and game theory models with multiple decision-makers.

ECON 5202 Mathematical Statistics
This course is the first of a two-semester graduate level study of the theory and practice of econometrics. The course assumes a working knowledge of concepts of calculus, linear algebra and some introductory probability and statistics. The objective is to work through the fundamentals of theoretical statistics.

ECON 5205 Quantitative Macroeconomics
This course aims to introduce modern quantitative methods in macroeconomics. The class will consist of two parts: The first part (about 40% of the lectures) will review the formal the

predictive, and prescriptive analytic techniques for analytical financial modeling. Throughout this project-based course, there will be an emphasis on asking good guiding questions and effectively communicating results through text, tables, and visualizations.

MS in Speech-Language Pathology

Yeshiva University's MS in Speech-Language Pathology is one of the few programs in the country specializing in the medical aspects of speech-language pathology. The Katz School provides graduate students with a strong academic and clinical foundation for the holistic treatment of communication disorders in children, adolescents, and adults. Through clinical externships and an individualized capstone project, students have numerous opportunities to gain practical, hands-on experience under the guidance of experienced faculty mentors. Students will benefit from diverse clinical externship opportunities in a range of settings and populations.

Requirements for Professional Practice

The MS in Speech-Language Pathology seeks to develop professionals who are knowledgeable, skilled and ethical in the assessment, diagnosis and treatment of communication disorders, and who are knowledgeable of the state and national requirements for docume

Course Descriptions

CSD 5000 Introduction to Speech-Language Pathology
Course focuses on development of treatment plans, establishment of evidence-based treatment objectives, tracking of treatment efficacy, record keeping, ethical professional behavior, and problem solving in a clinical setting.

CSD5100 Professional Issues/Topics in SLP: Level 1
The first level of the Professional Issues/Topics in SLP addresses the issues facing the graduate clinician in their practicum sites, as they embark on evaluation and remediation of disorders affecting communication. Skills needed for rehabilitation settings, populations, and age of the client will be addressed, as well as interaction with the health care team. Professional and ethical responsibilities will be a central focus of the course.

CSD 5110 Professional Issues/Topics in SLP: Level 2
The second level of the Professional Issues/Topics in SLP focuses on case management, research principles in clinical practice, use of evidence-based practice, counseling and updates on new healthcare regulation. CSD5110 will include guest speakers to inform the graduate clinician on specific aspects the SLP faces across work settings and across disorders.

CSD 5120 Professional Issues/Topics in SLP: Level 3
The third level of the Professional Issues/topics in SLP focuses on licensure, coding and billing for services, advocacy for coverage and payment, healthcare regulations/reform affecting our profession, professionalism, ethical conduct, credentialing, and contemporary professional issues.

CSD 5200 Externship: Level 1
This full-time course establishes the fountain of clinical and professional skills necessary for students to participate in off campus clinical community-based initiatives and other clinical opportunities as determined by Clinical Director. Must also enroll in CSD5201.

CSD 5210 Externship: Level 2
Full-time G[T)5(h)-4(is10x1]TJelll12 0 612 792 reW* nB,17 TJE,ie)5(n)-4(ce)5(a)-5(t)-4(a)-5(s)-6(ch)-3(o)-2(o)-2(l,)-4(grou)-7(p)-4(p)-

CSD 6200 Voice Disorders
This course addresses assessment and management of voice and respiratory diseases affecting oral communication and activities of daily living, focusing on perceptual, acoustic, aerodynamic and stroboscopic assessment, and the planning of goals/rationale/procedure for disorders affecting voice and respiration across the lifespan, population, and cultures. Case analyses, etiologic factors, and review of pertinent research in voice disorders are included.

CSD 6210 Alaryngeal Speech, Head/Neck Cancer, Endoscopy
This course addresses the anatomical, physical, and psychological impact for the patient with head/neck cancer and/or laryngectomy, management of head/neck cancer, as well as the principles and use of endoscopy by the SLP.

CSD 6300 Pediatric Swallow and Airway Management
This course provides students with knowledge and resources necessary to effectively evaluate and treat feeding, swallowing and breathing disorders in medically complex infants and children in medical, school, and home settings. Normal and abnormal anatomy/physiology affecting swallow and airway assessment and management from infancy through childhood will be included. Case analyses, etiologic factors, and review of pertinent research in swallow and airway management are included.

CSD 6310 Geriatric Dysphagia and Airway Management
This course provides students with knowledge and resources necessary to effectively evaluate and treat feeding, swallowing and breathing disorders in medically complex adults in medical, school, and home settings. Normal and abnormal anatomy/physiology affecting swallow and airway assessment and management from adult through geriatric. Case analyses, etiologic factors, and review of pertinent research in swallow and airway management are included.

CSD 6400 Child Language Development, Usage and Literacy
This course addresses Child language acquisition, development and foundations of literacy from infancy thru school age. Includes neurological, psychological, developmental, linguistic and cultural bases; speech/language developmental milestones; and the relationship of language and literacy. Students will learn about common models of language processing and the latest advances in neuroimaging studies on language processing in the brain.

CSD 6410 Child Language Disorders
This course addresses the wide variety of congenital and acquired language delays and disorders seen in the pediatric population; confronts current issues in the identification, research literature in child language disorders, and multicultural issues affecting assessment and management of children with language and literacy disorders.

CSD 6420 Aphasia Rehabilitation
This course addresses evaluation, diagnosis, and treatment of adults with aphasia, current theories of language processing and of acquired language breakdown subsequent to neuropathology. Case analyses, etiologic factors, and review of pertinent research in aphasia are included.

CSD 6430 Cognitive and Higher-Level Language Disorders
This course addresses the evaluation of communication impairments as a result from brain injury as well as neurodegenerative diseases. A multidisciplinary management approach to cognitive disorders is thoroughly discussed. Current issues in the field related to management of associated communication disorders as well as the importance of research in the field of cognitive disorders are discussed.

CSD 6440 Augmentative and Alternative Communication

This course reviews the history and theory of non-speech communication, diagnosis, intervention, and current research; survey of issues pertinent to the use of unaided and aided augmentative and alternative communication, as well as advocacy for those patients. Case analyses, etiologic factors, and review of pertinent research are included. This course offers a detailed investigation of varied populations, implementation of high-tech, low-tech and no-tech solutions, partner training and development of measurable goals.

CSD 6500 Audiology for SLP and CSD 6501 Lab

This course examines the bioacoustics of human communication and hearing including neuroanatomy, anatomy/physiology of the auditory systems, pathology of the auditory systems, acoustic behavior, psychophysical procedures, auditory dysfunction, anatomical and physiological studies associated with different categories of cochlear insult and central auditory nervous system function. Hearing tests and testing instruments, case finding and referral, interpretation of hearing test results, and organization of hearing conservation programs. Course requires CSD6501.

CSD 6510 Speech/Language Intervention for Hearing Impaired

Course examines the theory and clinical intervention for patients with hearing loss and a speech/language deficit. The impact of hearing disorders on communication is examined, including attention to receptive errors, speech/voice quality, and modification of treatment goals to account for underlying hearing deficit. The role of the SLP as a member of the cochlear implant team and/or deaf education is addressed. Case analyses, etiologic factors, and review of pertinent research are included.

CSD 6600 Research Methods and Critical Assessment of the Literature

This course focuses on application of design and analysis of research in Speech-Language pathology and includes sample peer reviews as well as critique of recent research articles. Review of granting agencies, funding sources, grants and guided experience on grant writing is also included.

CSD 7000 Capstone Project

This course serves as part of the comprehensive assessment of knowledge and skills for the graduate clinician, determining academic and clinical knowledge, applied to specific cases that are representative of the complexity expected of an individual who is prepared to enter the profession of speech- language pathology. The course is individually tailored to the degree candidate, taking into consideration the student's expressed areas of clinical interest.

Admissions Requirements

Successful candidates to the MS in Speech-Language Pathology must have:

- A bachelor’s degree from an accredited college or university
- Official transcripts from all colleges and universities attended