

# Course Development and Teaching

Two university units are responsible for course development and teaching.

**The Dean of Development and Educational Technologies**, Prof. Ina Blau, oversees two divisions: The Center for Technology in Distance Education (Shoham) and the Academic Development and Publishing Department.

The course development process is complex and involves multiple stages. OUI experts in text, design, video, programming, and pedagogy collaborate with faculty members to produce premium courseware and materials. Most courses rely on printed and digital books and textual study materials. OUI textbooks have an outstanding reputation, and provide the basis for courses offered at most other higher education institutions in Israel. The scope of filmed courses, educational software, and interactive online resources has increased in recent years as well. All materials, both textual and visual, are accessible on course websites via a variety of formats to enable dynamic and effective independent study.

**The Dean of Academic Studies**, Prof. Ophir Münz-Manor, is responsible for all universitywide and interdepartmental issues pertaining to studies at the OUI. The Office of the Dean formulates teaching policies and procedures, as well as regulations governing the student community, study group format and formation, and the training of faculty members.

## Courses Approved for Development

### History, Philosophy and Judaic Studies

The Basics of Modern Standard Arabic I  
The Basics of Modern Standard Arabic II  
New Directions in the Study of Hassidism (MA)  
Relations between State, Economy, and Morality: An Introduction  
State, Economics, and Morality  
1948: A War of Historians? (MA)

### Language, Literature, and the Arts

Academic Reading and Writing in the Humanities and Social Sciences, Bridging the Gap from Arabic to Hebrew  
Art in a Changing World: The Early Modern Period in Europe  
Curatorial Experience: Real and Digital Spaces  
Issues of Translation from Arabic to Hebrew in Modern Times  
Modern and Contemporary Art

### Management and Economics

Applied Economics: Course and Internship – Consolidated Financial Statements  
Corporate and Business Law  
Customer Relationship Management (MA)  
Data-Driven Marketing  
Directors' Workshop for Directors and Executive Managers (MA)  
Electronic Commerce Workshop (MA)  
Financial Consulting in Small Businesses and Nonprofits (MA)  
Intermediate Financial Accounting III  
Principles of Financial Statement Auditing  
Real-Estate Workshop (MA)  
Taxation II  
Technology and Innovation Management: Course and Internship  
Thesis Seminar Colloquium (MA)  
Workers, Employers and their Relations: Current Perspectives on the Organization and Management of Work (MA)

## Sociology, Political Science, and Communication

Ethics in Public Administration and Policy in Israel  
Network Cultures (MA)  
Political Participation and Public Policy (MA)  
Politics and Policy: Theory and Application  
The Politics of Elections  
Public Law (MA)  
Public and Political Economy  
Urban Politics (MA)

## Education and Psychology

Cyberspace Psychology: Educational Implications (MA)  
Metacognition and Learning (MA)

## Mathematics and Computer Science

Basics of Mathematics I  
Basics of Mathematics II  
Brain-Inspired Computing (MA)  
Deep Learning (MA)  
Fair Division Algorithms(MA)  
Introduction to Research in Computer Science (honors)  
Readings in Computer Science  
Workshop in Technologies for Cloud and Web App  
Development

## Natural and Life Sciences

Introduction to Computational Physics  
Introduction to Geochemistry  
Philosophy of Microbiology (MA)

## New OUI Publications – Lamda Books

Type	No. of Titles
Textbooks: final version	20
Textbooks: provisional version	46
Anthologies and study guides	56

## New Study Programs

### Undergraduate programs

BA in Literature – disciplinary degree and disciplinary degree with an added division of studies  
BA in Cinema – disciplinary degree and disciplinary degree with an added division of studies  
BA in Political Science & Public Policy  
BSc in Earth Science

### Tracks

Biotechnology for a BSc in Life Sciences  
Cellular-Molecular for a BSc in Life Sciences  
Field Studies for a BSc in Life Sciences  
Jewish history for a BA in History

### Research track

MBA with thesis

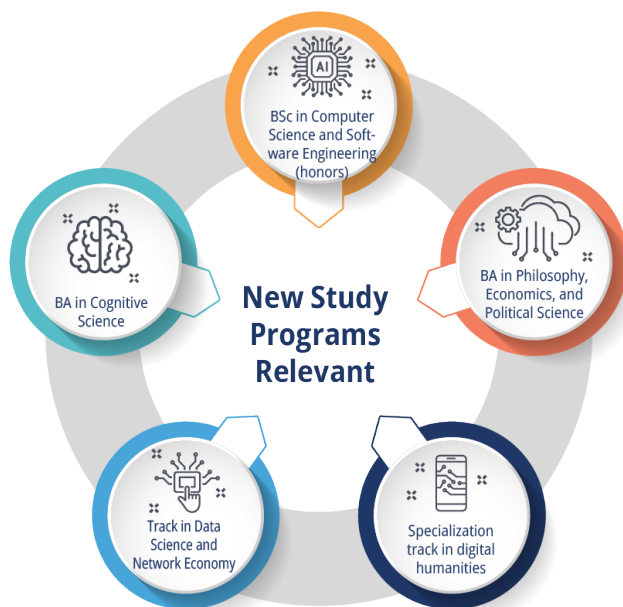
### Teaching-certificate program

Cinema

### Certificate programs

Gender Studies

## New Study Programs Relevant for the 21<sup>st</sup> Century



### **BSc in Computer Science and Software Engineering (honors)**

This honors program allows students interested in broadening their horizons in computer science the possibility of fast-tracking their degree. The program is designed for new students with outstanding pre-academic achievements and students who have completed the first semester of their BSc studies with honors.

The program offers two honors study tracks: a three-year track in computer science and a four-year track in software engineering.

Students will be offered professional support from senior faculty members, participation in inspiring courses open only to program participants, and tuition and subsistence scholarships that will enable them to concentrate on their studies. In addition, students will be able to join faculty members for scientific conferences abroad.

### **BA in Cognitive Science**

Cognitive science combines psychology, philosophy, computer science, and other disciplines towards understanding human processes of information absorption, processing, and implementation. This combination produces a complete picture of the factors involved in human behavior. The program examines the human mind, consciousness, language acquisition, human interaction with information channels creating sensory stimulation, etc. Honors students may choose one of three dual-disciplinary tracks: Psychology and cognitive science, philosophy and cognitive science, or computer science and cognitive science.

### **Track in Data Science and Network Economy**

The times we live in depend on a global network economy and vast amounts of data. Organizations and corporations require complex algorithms to analyze data and parameters related to their business or public activities. This type of analysis helps them thoroughly understand their business milieu (consumers, competitors, partners, etc.) and motivating factors.

Students will explore how to harness the power of advanced data processing to make significant economic decisions. Once they complete their studies, they will be prepared to integrate into the predictive analytics and business intelligence divisions of commercial and hi-tech companies and public bodies. This interdisciplinary expertise is relevant to diverse fields, such as finance and insurance, e-commerce, and higher education. In fact, it is relevant to any organization interested in planning its activity wisely through thorough acquaintance with the behaviors of its target audience.

### **Specialization Track in Digital Humanities**

Over the past two decades, the digital humanities have flourished, as texts, visuals, and music have become increasingly accessible in digital formats. This has led to the realization that it is currently possible to conduct research in the humanities using the quantitative computational method, with all of its advantages and challenges. In this specialized track, students will develop mathematical, computational, and technological literacy, explore digital

systems, and engage in a dialogue with their computer science colleagues towards developing research-supporting tools in the humanities.

### **BA in Philosophy, Economics, and Political Science**

This multidisciplinary degree opens a window on the public-political world, providing tools for a deeper understanding of political phenomena and mechanisms using three interrelated fields. Students will strengthen their analytical, logical, and critical thinking in studying the philosophical underpinnings of the ethical dimension of political structures. The field of political science helps us understand the authoritative structure of government systems and their modes of operation. It sheds light on their inner workings and their relationships with other social systems. Finally, economics plays a central role in financial decisions related to public life throughout the modern world, given the significance of economic models in understanding social phenomena.



## Learning Technologies

### Learning environment and course websites

Since the start of COVID-19, course website visits have increased by about 75%. The average number of visits per week is about 250,000. Students study online 24 hours a day, with peak hours from 5-6 pm. Most website traffic is from Israel, followed by the US, Germany, and the UK.

Over the past year, significant improvements have been made to OPAL (our Moodle-based LMS), providing agile response to needs that emerged during the pandemic. Improved mechanisms now allow for rapid transitions from frontal to online sessions. New policies on viewing video recordings were implemented, and management and monitoring methods were developed to help the teaching staff with the policy's implementation, which improved the website interface with Zoom, etc. Efforts were made to strengthen infrastructure and enhance the database in order to increase the system's speed and ensure it withstands the massive visit load.

### Development of courses in accordance with the online learning sequence model

Courses designed in accordance with the pedagogy of online learning sequences undergo a thorough pedagogical development process that incorporates all the learning materials and teaching and evaluation models. Courses designed in this way enhance the learning experience creatively, using varied media to present content and different user interfaces than other courses. Students benefit from course sites designed with features that highlight a recommended learning sequence. This encourages them to access the course content in a manner that is individualized to their needs and pace. Eighty courses are currently offered in the sequence model, and about seventy additional courses are in development and will be available in the next year or two.

### Learning analytics

About a year and a half ago, a learning analytics system was added to the OPAL learning environment. Initially,

it comprised a series of reports that visually displayed student learning patterns (including number of visits to a course website, rate of participation in online sessions, rate of recorded session viewings, etc.) Following significant progress made this year, teaching staff can now devise custom support measures to be used for specific students. One such measure involves personal messages sent to students based on the instructor's pedagogical needs. A pilot system enabled the tools to be developed gradually. The pilot project's instructors were actively involved in designing the system and provided feedback for each developed tool. The Department for Teaching and Learning is responsible for integrating the system and training the teaching staff in its use. The system undergoes ongoing assessment by the evaluation department.

### Innovation-promoting experimentation

A number of pilot programs were initiated this year:

- Online assignments in the OPAL environment: Following last year's pilot program, we integrated a new type of tutor assignment program this year. "OPAL assignments" appear on course sites and are graded in order to complement student online learning. These assignments integrate remarkably well into courses that follow the online learning sequence model. They offer diverse pedagogical options which combine various types of multiple-choice questions with open-ended questions, assignments based on forum discussions, group assignments, etc. A large assignment may be split into smaller online units, thus encouraging students to consistently use the course website over the semester. OPAL assignments are currently included in about 25 courses.
- MENT system pilot: MENT is a smart system that encourages student involvement and collaboration. The system analyzes the interaction between learners, grades the relative contribution of each participant, and assists in assessing the quality of the dialogue through machine learning. It allows teaching staff to grade each student's engagement and contribution to a discussion. The pilot was launched in two courses

during the second semester of 2021, with sixty participating students. It will continue in other courses next year.

## Online Teaching

During the first and second semesters of 2021, teaching was entirely online. At the beginning of the third semester, routine frontal sessions were restored. However, by mid-semester, circumstances necessitated reverting to distance teaching once again. During the past year, approximately 64,630 online sessions took place, a 260% increase over the previous year and over 600% more than in 2019, the last pre-COVID-19 academic year.

The OUI faced numerous administrative, logistic, technological, and pedagogical challenges related to our transition to an exclusively online system. The infrastructure supporting online tutoring sessions underwent numerous upgrades, and newly formulated interdepartmental work procedures were developed for those engaged in the distance learning process.

The Department for Teaching and Learning focused on adjusting teaching and learning processes to meet the needs of both faculty and students facing the new reality.

All distance learning sessions were offered in Hebrew and Arabic, which resulted in more students participating in numbers that far surpassed those of previous years. About 7,000 new students took part in online semester-opening events. The "Getting Online" workshop attracted 3,500 students, who improved their online study skills. Writing workshops catered to the needs of approximately 3,200 students. Over 2,000 individual tutoring sessions for the improvement of various learning skills were made available. At the end of each semester, dozens of sessions in Hebrew and Arabic were attended by students seeking assistance in preparing for final exams to be given in alternate formats.

A significant effort was made this year to improve the advanced academic writing skills of our students. We revitalized the seminar paper workshop and developed new support workshops (Advanced Academic Writing and Bibliographic Research). A new course, Academic Reading

and Writing for the Social Sciences, was developed in conjunction with the Department of Language, Literature, and the Arts. The course will be offered to new students for the first time in semester A of 2022.

Despite the looming COVID-19 threat, the Division for the Development of Study Skills continued to offer professional development opportunities and individual pedagogic support to teaching staff, with a view towards encouraging meaningful teaching experiences, enriching professional skills, and helping faculty adjust to the current circumstances. The training sessions were all online, and were attended by hundreds of staff members. Numerous measures were taken to stimulate dialogue among the participants. Course coordinators benefitted from an innovative service which offers workshops adjusted to the specific needs of course teams. Tutors are supported as they navigate online teaching; and tutors working with the Arabic-speaking population received support via teaching workshops.

The Corona Takeaways 2.0 conference focused on course evaluation processes, including assignments and exams. The conference focused on issues pertaining to evaluation during COVID-19 and "the day after." The conference was followed by a variety of evaluation workshops geared to the specific requirements of different departments.

Along with training and support, the Division for the Development of Study Skills encourages creative problem-solving through its weekly email tips. These ideas have included online and frontal tutoring principles and recommendations, technological tools to encourage active participation in sessions, and learning analytics. Faculty can access all the information on the study skills unit's new website.

For the fourth year in a row, all OUI faculty convened for a "Teaching and Learning" day for the sharing of knowledge and ideas concerning issues related to the theme of "seeing our students." Turnout was impressive, and participant feedback was favorable. At a ceremony that has already become an OUI tradition, seven initiatives received the Dean of Academic Studies Award for Initiative and Innovation in

Teaching. Five additional enterprises received honorable mention. This year, the award ceremony was held in memory of Prof. Oren Soffer.

### **Transfer tracks**

The OUI has an agreement with other universities in Israel, whereby students may transfer after successfully completing a cluster of OUI courses, which are determined according to the study program requirements. These “transfer tracks” allow students to take advantage of the OUI’s flexible admissions policy in order to gain a foothold in academia and demonstrate scholastic success, while avoiding the admissions hurdles placed by other universities.

A new transfer track was added this year to the Department of Electrical Engineering and Applied Physics at the Hebrew University of Jerusalem.

A new transfer track website offers user-friendly information on the different tracks, study conditions, and courses.

### **The library**

In 2021, the library underwent conceptual, physical, and technological changes that follow international trends and the university’s changing needs. During the COVID-19 period, the library developed new online services to inform and guide both students and faculty.

- Zoom instruction for student groups: The library invited the course coordinators of advanced courses to organize group Zoom instruction by the library team. As a result, thirty instruction sessions took place, focusing on library services and resources. Particular emphasis was placed on developing skills for searching online information sources via the library website.
- The library’s website offers access to digital forms used by students and faculty members (in addition to email and telephone contacts). The library has also developed guides to assist and direct students and faculty members looking for questionnaires, citation rules, etc.

- This year, the library planned and developed a collection of theses in the fields of mathematics and computer science, natural and life sciences, sociology, political science and communication, education, psychology, and culture studies. The collection is open to OUI students and faculty. Theses are uploaded and made publicly accessible (with the author's consent). The Exlibris designated platform Alma Digital makes it possible to upload digital collections in pdf form.

In July 2021, the library received a noteworthy contribution of approximately 1,000 books and journals in different fields, particularly the history of Eretz Israel and the Jewish people in the nineteenth and twentieth centuries. The collection also comprises numerous Hebrew and foreign-language literature, and Bible-related materials. The donation came from the estate of the late Amos Netzer, an expert on the history of Eretz Israel, and the late Esther Netzer, a literature and Bible lecturer at Bar-Ilan University. Librarian Vardit Netzer-Dorf donated the collection in memory of her parents.

The university was pleased to receive a collection of Hebrew journals from the Zalman Shazar Center in Jerusalem. The journals cover politics and government in the State of Israel, Zionism, Revisionist Zionism, studies in Jewish history, culture of Eastern Europe and the FSU, folklore, and Judaic thought and culture.

### **School for Local Government**

The School for Local Government, founded in 2013, is a cooperative endeavor of the Federation of Local Governments and the OUI to promote higher education among local government employees. The collaboration has entered its tenth year, and an agreement for another ten years has just been signed.

To date, over 2,100 students have studied towards bachelor's degrees in social science and the humanities, combined with a diploma in local government studies. Hailing from 75 local authorities, from Majdal Shams in the north to Eilat in the south, participants study in eighty study groups. So far, about 750 students have completed

their studies. In addition to the undergraduate program, about 100 students are enrolled in the graduate program in government and public policy. Students are partially funded by Mifal Hapayis scholarships. In 2020, the Local Authorities Federation non-profit organization Shahar-On, dedicated to social and professional development, joined the financing of these studies.

### School of Public Policy

The School of Public Policy For Civil Servants was founded in October 2018. Graduates of the school receive a bachelor's degree in social science and the humanities, as well as a diploma in public policy. The Civil Service Commissioner has approved it as a cross-service program, and it is being promoted in collaboration with the Civil Servants Union.

### Study Centers and Teaching Institutions

This year, the OUI transferred all Haifa and northern Israel campus activities to the Haifa Port campus, its new regional center. Beit Biram, which recently closed, had been home to numerous students, teaching staff, and campus personnel for 24 years.

The OUI and the IDF have launched the National Homeland Security College for Innovation, Entrepreneurship and Change, offering a prestigious curriculum. The college, initiated by the IDF, paves the way for joint knowledge development and content academization in innovation and entrepreneurship. After adjustment and development, this content will be incorporated into OUI courses.



Graduation ceremony, 2021

Photo: Oded Karni