

# Course Development and Learning Technologies

Course development, which lies at the heart of the OUI's academic endeavor, is under the auspices of the office of the dean of development and educational technology. The dean, Prof. Oren Soffer, oversees the office's two divisions: The Center for Technology in Distance Education (Shoham) and the Academic Development and Publishing Department.

The development process is complex and involves multiple stages. Many OUI professionals, together with faculty members, combine their expertise in text, design, video, programming, and pedagogy to create a smooth process of course development.

Most of the developed courses are based on printed and digital books and textual study materials. OUI textbooks provide the basis for courses offered at most of institutions of higher education in Israel.

Along with the printed materials we produce, each year has seen growth in the scope of study materials produced in other formats as well, including filmed courses, educational software, and interactive online resources. All materials, both textual and visual, are available on the course websites, where they can be accessed via a variety of formats to enable dynamic and effective independent study.

## Courses Approved for Development

### History, Philosophy and Judaic Studies

Controversies and Public Debate Through the Jewish Press (MA)  
Interuniversity course: The Middle East (MA)  
Interuniversity course: The Jewish people (MA)  
Interuniversity course: Multiculturalism (MA)  
Jewish Nationalism and Zionism  
Judaism, Christianity, Islam: An Introduction to the Monotheistic Religions  
Modern Russia: History and Culture (MA)  
New Directions in the Study of Hassidism (MA)  
Nightmare or New Horizons? Historical Research in the Digital Era (MA)  
Scientific Knowledge in the Muslim World (MA)  
Research Seminar on Feminism and Gender (MA)  
The Culture of the Enlightenment: The Public Sphere  
Transformations of Knowledge and Textual Intimacy in Jewish Culture (MA)

### Language, Literature, and the Arts

Cities and Books  
Classicism and Art: Canon, Reception, and Resignification (MA)  
In the Wake of War: Readings in Palestinian and Israeli Literature  
Introduction to the Arts  
Mathematics and Programming for the Humanities  
Methodology of Teaching Cinema Studies in High School

### Management and Economics

Advanced Financial Accounting I  
Advanced Financial Accounting II  
Advanced Financial Statement Auditing  
Advanced Managerial Accounting  
Advanced Taxation  
Big Data Analysis and Cybersecurity  
Consolidated Financial Statements and the Equity Method  
Contemporary Issues in Human Resources Management (MA)  
Corporate and Business Law  
Corporate and Business Law (MA)  
Financial Statement Analysis and Company Valuation  
Financial Statement Auditing  
Impact Investment: Towards Sustainable Social Services  
Intergenerational Economics (with practicum)  
Intermediate Financial Accounting I  
Intermediate Financial Accounting II  
Investments and Securities (MA)  
Israel's Economy (with practicum)  
Managerial Accounting  
Principals of Financial Statement Auditing  
Principals of Financial Accounting  
Public Economics (with practicum)  
Taxation I  
Taxation II  
Taxation III  
Technology Management and Innovation (with practicum)

## **Sociology, Political Science, and Communication**

Advanced Issues in the Study of Local Government (MA)  
Communication and Social and Political Discourse in Democratic Societies  
Didactic Seminar in Teaching Communication  
Introduction to the History of War  
Journalism in the digital age: Workshop and internship  
Journalism, Participatory Journalism and The Public Sphere  
Perspectives of Policy, Innovation and Sustainability  
Practicum in Teaching Communication  
Public and Political Economy (MA)  
Public Relations: Workshop with Practicum  
Social and Political Activism in the Era of New Media  
Teaching Communication: Methodology  
Training Program for Tel Aviv –Jaffa Municipality (MA)

## **Education and Psychology**

Big Data Analysis in psychology: Research and Applications (MA)  
Education policy: Seminar Course (MA)  
Field Experience in Psychology  
Introduction to Big Data Analysis in Psychological Research (MA)  
Occupational Therapy and Counseling (MA)  
Psychological Research: Experience and Scientific Writing

## **Mathematics and Computer Science**

Advanced Topics in Cyber Security (MA)  
Cyber Physical Systems  
Introduction to Machine Learning

## **Natural and Life Sciences**

Quantum Physics II

## **Focus on Program Development in the Department of Management and Economics**

The department has been revising two programs, which will be offered in a new format in 2021. The accounting program has been adapted to conform to the national reform in accounting studies. The undergraduate studies

program will be extended to equal 3.5 years of a standard university program, after which, students will take the final exam of the accountants' council. The designated "supplemental year," which students previously spent preparing for the council's exam, has been cancelled under the reform. Instead, undergraduate studies have been modified to include exam-preparation throughout the duration of the study program. The new curriculum includes many courses that follow a specific accounting teaching model. Students attend a weekly lecture (live or recorded) and a practice session where they apply the material taught in the lecture. This allows leading CPAs to give up-to-date lectures, and helps the students understand and internalize the learned material via practice. Work on the reform began over a year ago, and will continue over the next four years. New students will enter the revised track, while currently enrolled students will continue in the track they began.

The MBA program is the second program that has undergone comprehensive modification. As of 2021, the program offers three specializations: marketing; finance and financial management; and organizational behavior and HR management. Some courses are being replaced by new ones, some have been significantly abridged, and many courses offer alternative evaluation methods that enable students to accumulate a professional portfolio to assist their development and professional advancement. The program also promotes networking opportunities through new strategy and initiative clubs launched this year, and through meetings with senior managers from diverse sectors.

Each of these programs has about 1,000 registered students, and many thousands of our graduates hold an impressive variety of positions in the economic and industrial sectors in Israel and internationally. The main goal of the management and economics department is to offer students an education that will be intellectually challenging, improve their personal and professional development as contributors to Israeli society, and teach them the skills for continued independent learning.

## New OUI Publications – Lamda Books

Type	No. of Titles
Textbooks: final version	26
Textbooks: provisional version	24
Anthologies and study guides	66

## Learning Technologies

Since March 2020, Shoham has diverted most of its resources to planning for immediate conversion to the fully online instruction necessitated by the COVID-19 crisis. This required numerous rapid developments and the creation of a broad and effective operational system.

### Learning environment and course websites

During the COVID-19 period thus far, the number of visits to course sites has increased dramatically. In the first four days of the second semester of 2020, the number increased by 63% compared with the first four days of the previous semester.

Tremendous numbers of users visited the sites during live broadcasts and exams. At the end of the second semester of 2020, the number of visits to course sites increased by 51%, compared with the same period in 2019. In the first ten days of the summer semester of 2020, the number of visits increased by 86% compared to the summer semester of 2019.

### Development of courses designed 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 takes into consideration the learning materials, teaching model, and mode of evaluation. The learning experience in these courses is highlighted in creative ways, and course content is presented via various media resources. Students can follow a recommended learning sequence based on user interface

and visual design and benefit from content adjusted to each student's pace of progress over the semester. Currently, 35 sequence-based courses are available. Seven additional courses are planned for the first semester of 2021. Thirty courses are currently undergoing development and will be offered in the next year or two.

### Online tutoring sessions

This year, 474 courses opened online study sessions (96% on Zoom, and the rest using Ofek). In all, 52,447 students registered for online groups (38% of all registrations). This represents an increase of about 61% from 2019.

### Filmed courses

The realm of video has continued to develop this year – from short video clips providing focused explanations and illustrations of specific topics, to full-scale lectures that present the main material, wholly or partly replacing textbooks and study guides. Video sessions used in this manner create a greater sense of contact between students and lecturer. This format also offers a more rapid method of developing or updating OUI courses.

### Pilot programs and innovation

Learning analytics consists of gathering, measuring, analyzing, and presenting online learning patterns aimed at enhancing teaching, learning, and course website contents. The information is displayed on a control panel on the course site, providing visual indications of the imprints left by students in the learning environment. These tools allow faculty to engage in pedagogical interventions as the semester progresses, thus focusing the learning and improving student perseverance. Each course has a control panel that displays the number of daily visits to a course website, the degree of participation in live online sessions, and the number of video viewings. Special analytics integrated into the sequence courses allow the teaching staff to monitor student progress over the course's duration. This year, new (mainly video) options have been added to the control panel to identify prominent points of interest.

The integration and use of analytics tools has also expanded through coordination with the Department for Teaching and Learning. An innovative pilot launched jointly with the Unit for Student Retention in the Discrete Mathematics course uses machine learning. The field of criterion-dependent intervention was developed to allow lecturers to engage in interventions with students according to predetermined pedagogical criteria. In July and August, approximately sixty senior faculty and teaching staff participated in focus groups intended to determine a policy for using learning analytics to applications related to students.

### **Digital accessibility**

The COVID-19 outbreak has directly affected digital accessibility, and required us to take the following measures:

- Access to exams from home: Dozens of exams were made accessible to blind and visually impaired students in two types of exams – those included in the assignment system, which required access to Word documents, and course website exams that required access to closed-question quizzes. Course coordinators underwent appropriate training and individual mentoring.
- Real-time transcription of online tutoring sessions: Organization-wide infrastructure was set up to enable deaf or hearing-impaired students to participate in Zoom tutoring sessions through real-time transcription of the sessions.
- Subtitled video clips: In addition to subtitles defined as part of the course content, captions were added, as needed, to video recordings of tutoring sessions.

