

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. Faculty members, together with many other OUI professionals, 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 text-based study materials. OUI textbooks provide the basis for courses offered at most 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 text-based 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 in 2019

History, Philosophy, and Judaic Studies

The Middle East between the World Wars: Interethnic and Interreligious Relationships (MA)
The Culture of Enlightenment in 18th Century Europe
Part A: The Private Sphere
The Culture of the Enlightenment in 18th Century Europe
Part B: The Public Sphere
Scientific Knowledge in the Muslim World (MA)
North African Jews in the Second World War (MA)
Transformations of Knowledge and Textual Intimacy in Jewish Culture: Texts, Manuscripts and Printed Books (MA)
Messianism, Redemption and the End of Days: Between Religion and Society (MA)
Christians and Muslims in the Middle Ages: Reciprocal Imagery (MA)
Women and Gender in Times of War and National Crisis: A Comparative View (MA)
Literature of the Jewish Sages as an Historical Source: Shifting Approaches (MA)
Between East and West: Intercultural Intersections in the Hellenistic Era (MA)
Controversy and Public Debate through the Jewish Press (MA)
Individual tutoring (MA)
Inter-university course (MA)
Modern Russia: History and Culture (MA)
The Contents of Mental States

Mobility, Communication and Space in the 19th Century: Classic and Digital Approaches (MA)

Language, Literature, and the Arts

In the Wake of War: Readings in Palestinian and Israeli Literature
Academic Reading and Writing in the Humanities and Social Sciences
History of Pop and Rock Music

Management and Economics

Faces of Poverty: Social and Economic Perspectives

Sociology, Political Science and Communication

Digitality in Culture and Everyday Life
Public and Political Economy (MA)
Introduction to Theories and Methods in Political Science for MA Students (MA)
Introduction to New Media
Introduction to the History of War

Education and Psychology

Diagnostics: Occupational Assessment through Analysis and Interpretation of Psychological Tests (MA)
Learning with Technology: Cognitive and Social Perspectives
Introduction to Big Data Analysis in Psychological Research (MA)

Seminar: Educational Policy (MA)
Metacognition and Learning (MA)
Leadership in Education (MA)
Big Data Analysis in Psychology: Research and
Application (MA)

Mathematics and Computer Science

Cyber Physical Systems (MSc)

New OUI Publications

Type	Titles
Textbooks: final version	33
Textbooks: provisional version	18
Anthologies and study guides	63

Learning Technologies

Learning environment and course websites

An online learning environment site based on Moodle open code (OPAL) is set up for each OUI course. The online contents and activities of each site differ, and are determined by the teaching coordinators to suit the course needs. The OPAL version, developed and designed by the Shoham Center, includes custom-made extensions that are not part of the Moodle core, adjusted to the needs of the OUI courses.

In February 2019, a new format of the OPAL learning environment was introduced which is compatible with the pedagogy of online learning sequences. The new format's exclusive user interface has personalization capacities that provide students with indications about their progress throughout the course. The new format also comprises advanced editing tools that enable academic staff to update sequences on the course site without difficulty. A new methodology integrated this year allows fast and effective development of the system, and ongoing improvements over short time periods. Besides being beneficial to the users, these ongoing upgrades offer the course staff a continuous flow of feedback that influences subsequent developments.

Online tutoring

This year, 805 online groups were opened for 384 courses. Most used the ZOOM system, and the rest used the OFEK system. In all, 31,367 students (25%) registered for online groups in 2019 (including academic English courses).

Filmed courses

Filmed lectures continue to develop and expand from short video-clips providing focused explanations and illustrating certain topics, to full-scale lectures that comprise the main learning material of a course, sometimes replacing whole or parts of textbooks and study guides. Leading OUI and external experts present the lectures. The learning content is presented in a dynamic visual manner, creating a sense of direct contact with the lecturer. This format provides a relatively fast option for developing or updating OUI courses.

Pilot programs and innovation

The past year saw developments in the area of learning analytics, which involves the gathering, measuring, analysis, and presentation of online learning patterns towards improving teaching, learning, and course website content. The information gathered is displayed on a control panel that provides visual indications of the imprints left by students in the learning environment. The control panel is specifically adjusted to courses that follow the pedagogy of online learning sequence, displaying the progress of students, and the extent of their success in various evaluated assignments. These tools allow faculty to generate pedagogical interventions for students via the course websites. Over the semester, these interventions help focus the learning and improve the site's contents. This year, a counter has been developed for every course which displays the number of times a course website is visited each day, the degree of participation in live online sessions, and the extent of video viewing. A professional learning analytics team from the Open University of the UK is supervising the design of the OUI strategic plan for learning analytics. In May 2019, an OUI team underwent designated training in the UK.

Development of course-specific interactive components

- An interactive system developed for music courses displays musical scores and follows the progress of the music using a cursor. The system enables the singling-out of voices from a polyphonic texture, control of performance speed, choosing and playing single notes, adding comments, and so on. Together, these features enable interaction with a musical sample. The system is available to students in the Music at First Sight course, and will eventually be offered in other courses as well.
- Eight online evaluations were developed for visual cognition courses, so that students can carry out evaluations as part of their course assignments. The tests, which evaluate visual and selective attention, are used in the Visual Cognition, Cognitive Psychology, and Mathematical Disabilities: Cognitive, Neuropsychological and Educational Perspectives courses. The system comprises management tools that enable faculty to independently update various parameters of the experiments.



- Interactive courseware was developed this year for the Physiology of Behavior course. About 200 interactive media items were uploaded to the system. The textbook is linked with the course website by QR codes, and students who prefer to use the book's printed version are able to access related media by scanning the barcode.
- An interface developed this year for the Topics in Physical Chemistry course enables an interactive three-dimensional presentation of chemical structures, particularly molecules. It allows the course staff to illustrate and manipulate the three-dimensional structure of various molecules for comparison, instruction, and in-depth study. The integration of this tool into the course's learning sequence, specifically into evaluated assignments, enhances the students' learning experience.

Digital accessibility

Key digital accessibility improvements this year include:

- **Tests:** Texts were made accessible to visually impaired students via software that reads the text aloud.
- **Three-dimensional printing of graphs:** Understanding graphic information is a challenge for the visually impaired. Experimental production began this year for three-dimensional tactile graph models.
- **Subtitles:** All digital films defined as permanent course content have been subtitled. To meet the increasing use of films, a convenient mechanism has been developed for adding subtitles to course website video recordings. In the past two years, about 1,000 video hours have been subtitled.
- **Digital texts:** Access has been improved to new materials produced by the Department of Academic Development and Publishing (books, study guides, textbooks, etc.). Students can now access the available material on request.
- **Training:** Professional staff from various departments underwent training over the past year, and work procedures were assimilated.