

HAL 373 – Critical Issues in Jewish Law and Science

Fall 2021; Wednesdays 6:30-8:55pm (eastern)

Topic: Genetics

Instructors: Rabbi Jill Hackell, M.D. (jghackell@gmail.com) & Rabbi Matthew Goldstone, Ph.D. (mgoldtone@ajr.edu)

Course Description

In Fall 2021 this course will focus on the intersection of halakha and genetics. We will explore the nature of, and halakhic attitudes towards, GMOs (Genetically Modified Organisms), cloned and cultured meat, gene therapy, and the relationship between genes and Jewish identity. Grounded in a close reading of Hebrew primary sources together with English language responsa, this course will provide basic scientific and halakhic knowledge about key issues in the 21st century intersection of science and Jewish law.

Prerequisite: Hebrew 1B (HEB 251)

Course Goals and Objectives

- Students will learn about the science of genetics and some of its major contemporary applications.
- Students will improve their abilities to read, parse, and translate traditional sources of Jewish law in Hebrew (as appropriate to their level).
- Students will engage with the legal, ethical, and philosophical questions that arise from the intersection of Jewish law and genetics, and students will be able to discuss these issues from both an academic perspective and as the basis of practical religious guidance.

Course Requirements

- Active, constructive class participation is expected.
- Proper preparation of materials (see below)
- A final paper will be due by Dec. 30, which will cover one of the class session topics or another issue in the intersection of genetics and Jewish law that is of interest to you. It may be in the form of **a scholarly paper, an adult education lecture/program, or an analysis of a case study**. The work should be **original, ~ 8 – 10 pages in length, and include citation of classical and contemporary sources**. Topics should be submitted to us in advance, for approval. (See Paper Guidelines, attached to the end of this syllabus)
- Complete the [AAAS DoSER Post-Course Survey](#)

Preparation

Please prepare all readings and sources in advance of the session during which they will be read and discussed. Some sessions will focus on sources of traditional Jewish law in Hebrew while others will

engage with English responsa and other sources. For sessions that are dedicated to Hebrew sources, we will upload the sources in advance to Populi and they will be divided up into three different tiers based upon facility with Hebrew (within a single document) for you to translate (using [Jastrow](#), [Morfix](#), and other dictionary resources – but *not* existing translations). If you have a more limited Hebrew background, then please translate all of the untranslated sources in the “Tier 1” section and read through the translations of the Tiers 2 and 3 sources in the document with translations. If you have a stronger Hebrew background, please translate all of the untranslated sources in Tiers 1 and 2, and read through the translations of the Tier 3 sources. If you have strong Hebrew, then please translate all of the untranslated sources in all three Tiers. Please note that for some sources (particularly those in Tier 3) we have included some links on words, phrases, or names that might be helpful as you translate.

Grading: Grade in class will be a letter grade, based 35% on classroom participation, 25% on preparation of Hebrew sources for class, and 40% on the final paper.

Attendance policy: Punctual attendance is expected. We follow AJR’s attendance policy as delineated in the Academic Catalog.

Incomplete policy: Incompletes are discouraged, and will only be granted under extraordinary circumstances with approval of both instructors and the Academic Dean.

Session Topics

Week 1 – 10/6 – Introduction to Genetics

Overview of course syllabus and requirements
Introductory lecture by geneticist, Dr. Susan Zusman

Week 2 – 10/13 – Cloning Animals and Humans (Hebrew sources)

Background Sources: Deut. 14:12-15
Tier 1 Hebrew Sources: b. Hullin 64b; m. Bekhorot 1:2; Mishneh Torah Laws of Forbidden Foods 3:1; Gen. 9:4, Exod. 22:30, Deut. 12:23; Sifrei Deut. 76
Tier 2 Hebrew Sources: Tur YD 62; b. Sanhedrin 59b, 65b, 67b; Snei Luhot HaBrit; Malbim on Gen. 18:7; R. Ze’ev Weitman, “Cultured Meat”
Tier 3 Hebrew Sources: p. Niddah 3:2; Kohelet Rabbah 5:10; Ben Yehoyadah on San. 65b; Marit Eyin on San. 65b

Week 3 – 10/20 - Cloning Animals and Humans

Cloning Animals for Food – Kashrut of Cultured Meat
Readings: (see Populi for sources and assignment details)
Kenigsberg JA, and Zivotofsky AZ, “A Jewish Religious Perspective on Cellular Agriculture”
Rabbi Daniel Nevins, “[Kashrut of Cultured Meat](#)” CJLS YD 81.2017
Cloning Humans
Michael J. Broyde: Cloning and the Noahide Legal Code p. 208 (by arrow) to end

Week 4 – 10/27 – Genetically Modified Organisms (GMOs)

Lecture about GMOs by Dr. Susan Zusman
Background Reading: “[Learning to Love G.M.Os.](#)” New York Times Magazine Sunday July 25. 2021 [also saved as a pdf in Populi]
Begin discussion of Hebrew sources

Lev. 19:19; Deut. 22:9-11; Nachmanides on Lev. 19:19; Be'er HaGolah 2:10; Zohar Kedoshim 86b; p. Kilayim 1:1; b. Avodah Zarah 63b-64a

Week 5 – 11/3 – GMOs (Hebrew sources)

Please read this article, [“It could soon be harder to find produce untouched by chemicals”](#) (Washington Post 6/9/21) [also saved as a pdf in Populi]

Tier 1 Hebrew Sources: Mishneh Torah Laws of Kilayim 1:4; Shulhan Arukh (SA) Yoreh De'ah (YD) 295:1, 2, 7; SA YD 296:1-2, 4-5, 7, 13

Tier 2 Hebrew Sources: SA YD 296:1-2; Taz on SA YD 297:2; SA YD 297:5 and 7; m BK 1:1; m. BK 1:2; m BB 2:1-3

Tier 3 Hebrew Sources: Teshuvot Rema 10; Teshuvot Node BeYehuda (R. Yehezkel Landau) Hoshen Mishpat 24

Optional further reading: [Attack of the Superweeds](#) [also saved as pdfs in Populi]

Week 6 – 11/10 – GMOs

Readings: (Please see Populi for sources and assignment details)

“Attack of the Superweeds” New York Times Magazine August 22, 2021

Rabbi Daniel Nevins, [“Halackhic Perspectives on Genetically Modified Organisms”](#) CJLS YD 297 (excerpts)

Week 7 – 11/17 – RETREAT (No class)

Week 8 – 11/24 – Gene Therapy

Lecture about Gene Therapy by Dr. Susan Zusman

Begin discussion of Hebrew sources: Midrash Tanhuma Tazria 5; Gen. 30:37-42; Ibn Ezra on Gen. 30:39; Gen. Rab. 73:10

Week 9 – 12/1 – Gene Therapy (Hebrew sources)

Tier 1 Hebrew Sources: BT Nedarim 20a; BT Berakhot 20a and 5a; Gen. 30:21; Targum Pseudo-Jonathan to Gen. 30:21

Tier 2 Hebrew Sources: Mishneh Torah Laws of Acquiring and Gifts 4:2 and 8; BT Ketubbot 11a; Tosafot on San. 68b; Igrot Moshe Even HaEzer 4:10

Tier 3 Hebrew Sources: Tzitz Elizer 15:45

Week 10 – 12/8 – Gene Therapy

Sources TBD

Week 11 – 12/15 – Jewish Identity (Hebrew sources)

Please read the following article, [“Top court backs rabbis who revoked conversion over secular lifestyle”](#) [also saved as a pdf in Populi]

Background: Deut 23:3-4 & 8-9; Neh. 13:23-30; BT Yevamot 78a-78b

Tier 1 Hebrew Sources: BT Yevamot 47a-47b; t Kid. 5:1 & 3; BT Pesahim 87b; m Maksh. 2:5-7

Tier 2 Hebrew Sources: BT Yoma 83b; SA EH 4:33; BT Kid. 73a; SA EH 4:31; Be'er Heitev on SA EH 4:31

Tier 3 Hebrew Sources: Mishneh Torah Laws of Forbidden Sexual Relations 18:13-14; m Ket. 2:7-8; m Kid 4:4-7; MT 13:8-10

Week 12 – 12/22 – Jewish Identity

Guest Speaker – Dr. Harry Ostrer

Sources TBD

Final Paper Guidelines

General Guidelines:

- Well written and free from typos and other errors
- Correct length and format (standard 12-point font, double spaced, 1 in. margins, etc.)
- Proper citation of sources; includes reference to both traditional Jewish and contemporary sources

Scholarly Paper:

- Has a main point/argument that is supported by evidence
- Evidence draws from relevant traditional and contemporary sources

Adult Education Program/Lecture

- Includes a thorough description of each portion of the program/lecture
- Includes full text for sources shared with participants and citations for other sources used

Case Study

- Clearly describes the scenario under discussion
- Identifies the most relevant issues involved in the scenario
- Integrates both traditional and contemporary sources into the analysis
- Recommends a course of action for the scenario, grounded in an analysis of the situation and sources