

CLINICAL EMBRYOLOGY MASTER'S PROGRAM WITH THESIS COURSE CONTENTS

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
IST 502	Biostatistic	(3,2,0)	4	9	Compulsary/Elective Course
<p>Basic concept, tables, graphs, Prevalance, incidence, Central Tendency measurements ;mean of arithmetic, mode, median, Homegenity measurements; Range, variance, standart deviations, coefficient of variation. Probability, Conditional probability, Bayes Rule , Bernoulli distribution, Binom distribution, Poisson distribution, Normal distribution. Sampling , Confidence interval, Hypothesis testing; hypothesis testing of one-population and two population mean .Relationship measurements, Contingency tables, ANOVA, Regression Analysis, time series and SPSS applications</p>					

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
KLE 500	Master thesis study	(0,0,0)	0	30	Compulsary
<p>Preliminary experiments of the thesis. Discussing and evaluating the results. Thesis experiments in the laboratory. Control of the results. Discussion and interpretation of the results. Comparison of the results with the literature. Writing the thesis according to the institute rules. Presentation of the results at the relevant scientific congress. Defending the findings of the thesis.</p>					

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
KLE 501	Preparation for Master's thesis	(3,0,0)	3	6	Compulsary
<p>Determination of thesis topic. Learning to take advantage of the counselor's opinions and suggestions. Build a hypothesis. To make a literature review on the subject. Evaluation of the literature. To determine the material method. To project. To establish protocols with other disciplines, if any. To choose the right material. To obtain information about the supply of materials. To review laboratory facilities. To make preliminary experiments.</p>					

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
KLE502	Seminar	(3,0,0)	0	6	Compulsary
<p>To provide a better understanding of the structure, functions, anomalies and malformations of the female and male genital system, To understand the articles and documents related to the subject, to scan up-to-date information on the subject, to combine the relevant information, To internalize and to transfer.</p>					

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
KLE 503	Reproductive System Histology and Embryology	(3,2,0)	4	9	Compulsary/Elective Course
<p>Development of the female genital system. Differentiation of the female genital system. Development of the male genital system. Differentiation of the male genital system. Histological structure of the female genital</p>					

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					system. Histological Structure of the Male Genital System. Ovulation. Implantation. Embryogenesis. Genital cycle, Ovarial cycle. Uterine cycle. Ovary-pituitary relationship. Testis-pituitary relationship. Spermiation.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
KLE 504	Reproductive System Anatomy	(3,2,0)	4	9	Compulsary/Elective Course
					Femaleinternal genital organs. Male Internal Genital Organs. Male external genital organs. Female External Genital Organs. Testis. Inguinal Canal. Spermatic cord. Ductus deferens. Prostate Gland Glandula vesiculosa, Glandula bulbourethralis. Penis. Vessels of male genital tract. Nerves that stimulate the male genital system. Ovary. Tuba uterine. Uterus. Vagina. Breast. Veins of female genital system. Nerves that stimulate the female genital tract

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary/Elective Course
KLE 505	Reproductive Biochemistry	(3,0,0)	3	6	Compulsary /Elective Course
					Biochemical overview of the male and female reproductive system. Gonadal steroids. Hypothalamic hormones. Pituitary hormones. Glycoprotein hormones. Gonadotropins. menstrual cycle. Functions of the male reproductive system. Hormones of the male reproductive system. Overview of pregnancy and childbirth events. Laboratory tests of reproductive function in women. Laboratory tests of reproductive function in men. Pregnancy laboratory tests. Tumor markers associated with the reproductive system.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary /Elective Course
KLE 506	Laboratory Knowledge	(3,2,0)	4	9	Compulsary Course
					Standardization in the IVF Laboratory. Quality Guidelines. Medical Laboratory standards. Standardization of IVF laboratory equipment. Standardization of IVF laboratory ventilation and filter systems. Standardization of IVF laboratory procedures. Adherence to the accreditation organisation. Staff education. Forward considerations for standardization.

Course Code	Course Name	(T,A,L)	Credit	ECTS	Compulsary /Elective Course
KLE 507	Scientific Research Techniques and Publication Ethics in IVF	(3,0,0)	3	6	Compulsary /Elective Course
					Basic concepts. Science. Information. To know. To learn. Experience in IVF. Consensus in IVF, expert opinion in IVF. Using scientific methods in IVF. Rights of IVF Patients. To accept the embryo as a potential human. Not to harm social values. Which materials obtained in IVF application laboratories can be used for experimental purposes and which are not. What are the legal restrictions and rights? Adhering to WHO Criteria in practice. In vitro fertilization and embryo transfer declaration of the World Medical Association. Publication ethics in IVF studies.