

<b>Study program: REPRODUCTIVE BIOLOGY</b>			
<b>Course title::</b> Infertility and assisted reproduction			
<b>Teacher:</b> Artur Bjelica, Aleksandra Trninić Pjević			
<b>Course status::</b> obligatory			
<b>ECTS:</b> 5			
<b>Requirements::</b> -			
<b>Course objectives</b> The learning objective is to introduce students to definitions, incidence, causes, diagnostics and treatment of infertility. Theoretical instruction offers students insight into contemporary approach to infertility problems which 15 -17% of couples in reproductive age face presently. All diagnostic and therapeutic procedures as well as all forms of assisted reproductive technologies which provide solutions to the problem- to give birth to offspring			
<b>Learning outcomes</b> Upon successful completion of pre-examination and examination tasks, students can: understand contemporary and traditional approach to infertility treatment as well as their differences, understand and control all diagnostic procedures in infertility treatment; accept contemporary approach to treatment and understand hypotheses and variety in treatments with regard to infertility causes; understand that approach to the treatment is individual and adjusted to each couple; understand and control basic techniques of assisted reproduction as well as their prognostic criteria..			
<b>Syllabus</b> <i>Theoretical instruction</i> Infertility of a couple, definition, incidence, causes. Frequency of infertility and its significance in demography. Diagnostic tests. Hormone profile. Ovarian reserve. Folliculogenesis, monitoring and timing of the maturation of ovarian follicle in natural and stimulated cycle. Anovulation. Polycystic ovary syndrome (PCOS). Hyperprolactinemia. Endometriosis. Inflammatory diseases of upper and lower reproductive systems and their influence on reproduction. Possibilities and techniques of surgical correction of pathologies in female reproductive system. Extragenital reproductive system and its influence on reproduction. Assisted reproductive technologies and indication areas. Intrauterine insemination. In vitro fertilisation and its variations: IVF, ICSI, AHA, GIFT, ZIFT, TESA, MESA. Immune causes of infertility, method of testing, potential treatment options. Legal – ethical aspects of in vitro fertilization: donor gametes, donor embryos, surrogate mother. <i>Practical instruction</i> Introduction to activities of the Centre for Human Reproduction. Introduction to work protocols, diagnostic procedures and therapeutic solutions. Attendance to the contact with couples, consideration of the problem, and insight into medical documentation. Introduction to applied diagnostic tests and reconsideration of the results. Introduction to the therapeutic schemes in treatment of certain conditions by individual approach to each couple. Introduction to keeping documentation in IVF.			
<b>Literature</b> 1. Speroff L and Fritz MA. Female Infertility. In: Clinical Gynecologic Endocrinology and Infertility. 7th edition, Lipincott Williams and Wilkins 2006. 2. Rizk B, Velasco GJ, Sallam H, Makrigiannakis A, Infertility and Assisted Reproduction. Cambridge University Press. 2008.			
<b>Weekly teaching load</b>	<b>Lectures:</b> 2	<b>Practical lectures:</b> 0+1+0	
<b>Teaching methods</b> Lectures, consultation, seminar			
<b>Evaluation of knowledge (maximum score 100)</b>			
<b>Pre-exam obligation</b>	points	<b>Final exam</b>	points
Student engagement in lectures	5	Final test	40
Practical lectures		Oral exam	30
Seminar	25		