



<b>Study program:</b> Doctoral Academic Studies in Biomedical Sciences		
<b>Name of the subject:</b> REPRODUCTIVE ENDOCRINOLOGY AND INFERTILITY		
<b>Teacher(s):</b> Artur L. Bjelica		
<b>Status of the subject:</b> elective		
<b>Number of ECTS points:</b> 20		
<b>Condition:</b> -		
<b>Goal of the subject</b> Acquisition of theoretical and practical knowledge in the field of infertility and training of gynecologists for performance of modern diagnostic procedures as well as various methods of treatment of infertility. The aim of the course is to introduce doctoral students in the team work of experts, which enables the preservation of the mental and physical health of a married couple, good social functioning, and at the same time the final solution of their problem, the realization of pregnancy.		
<b>Outcome of the subject</b> Adoption of the latest knowledge in the field of reproductive endocrinology, diagnostics, treatment and application of methods of assisted reproductive technologies and preimplantation diagnostics as well as ethical issues in assisted reproduction.		
<b>Content of the subject</b> <i>Theoretical lectures</i> <ol style="list-style-type: none"> <li>1. Reproductive endocrinology</li> <li>2. Insulin resistance and polycystic ovary syndrome</li> <li>3. Processing of the married couple, anamnesis, examination, acquaintance with previous analyzes and procedures</li> <li>4. Ultrasound monitoring of the follicle development in the natural and stimulated cycle</li> <li>5. Sonohysterography and hysterosalpingography - performance, advantages and disadvantages</li> <li>6. Poor responders and premature ovarian failure</li> <li>7. One-day diagnostics of marital infertility testing - practical application</li> <li>8. Performing endoscopic operations in infertility</li> <li>9. Ovulation stimulation protocols in an assisted reproduction program</li> <li>10. Artificial homologous insemination of AIH, principles of work</li> <li>11. Laboratory processing of gametes and fertilization</li> <li>12. Embryo transfer - principles of work</li> <li>13. Cryopreservation of embryos, methods and principles of work</li> <li>14. Preimplantation genetic diagnostics, indications, methods and principles of work</li> <li>15. Legislative measures of assisted reproductive technologies and the role and importance of monitoring biomedically assisted fertilization</li> <li>16. Oncofertility</li> <li>17. Ethical dilemmas in infertility</li> </ol> <i>Practical lectures</i> Introduction to modern clinical work and preparation of seminar papers.		
<b>Recommended literature</b> <i>Compulsory</i> <ol style="list-style-type: none"> <li>1. Jones R, Lopez K. Human Reproductive Biology. Elsevier: London, 2016.</li> <li>2. Taylor H, Pal L, Seli E. Speroff's Clinical Gynecologic Endocrinology and Infertility. Wolters Kluwers: Philadelphia, 2020.</li> <li>3. Strauss, J, Barbieri R. Yen &amp; Jaffe's Reproductive Endocrinology. Saunders: Philadelphia, 2013.</li> <li>4. Gardner D, Weissman A, Howles C, Shoham Z. Textbook of Assisted Reproductive Techniques: Two Volume Set. Taylor &amp; Francis: Boca Raton, 2018.</li> </ol> <i>Additional</i> <ol style="list-style-type: none"> <li>1. Fritz MA, Speroff L. Clinical Gynecologic Endocrinology and Infertility, 8<sup>th</sup> ed. Lippincott Williams &amp; Wilkins, 2010.</li> </ol>		
<b>Number of active classes</b>	<b>Theory:</b> 60	<b>Practice:</b> 45
<b>Methods of delivering lectures</b> practical skills teaching, individual and online consultation, seminar papers		
<b>Evaluation of knowledge (maximum number of points 100)</b> activities during lectures 25		

seminars: 10

SRW: 15

oral exam: 50