

PEDIATRIA GINECOLOGIA E GERIATRIA (DIU001)

1. language

Italian

2. course contents

Coordinator: Prof. VALENTINI PIERO

Year Course: I

Semester: II

UFC: 6

Modules and lecturers:

- GINECOLOGY AND OBSTETRICS (DIU003) - 2 ufc - ssd MED/40

Prof. Lucia Masini

- INTERNAL MEDICINE (DIU002) - 1 ufc - ssd MED/09

Prof. Valerio Spuntarelli

- INTERNAL MEDICINE (GERIATRICS) (DIU006) - 1 ufc - ssd MED/09

Prof. Francesco Landi

- PEDIATRICS (NEONATOLOGY) (DIU004) - 1 ufc - ssd MED/38

Prof. Francesco Cota

- DEVELOPMENTAL PEDIATRICS (DIU005) - 1 ufc - ssd MED/38

Prof. Piero Valentini

3. BIBLIOGRAPHY

Gynecology and obstetrics / Masini Lucia

- Caruso "Manual of Gynecology and Obstetrics", CIC Ed. Internazionali, Rome, 2017, III Edition - ISBN 978-88-9389-006-9
Part I - Gynecology - Chapter 1- Elements of the anatomy of the female genital system pag. 3-14; Chapter 2 - Sexual differentiation, malformations of the genital system pag. 17-26; Chapter 3 - Female puberty pag. 29-33; Chapter 4 - Menstrual cycle and endocrine regulation pag. 35-43; Chapter 5 - Menstrual irregularities and pathological amenorrhea pag. 45-56; Chapter 6 - Hyperandrogenism and polycystic ovary syndrome pag. 57-68; Chapter 7 - Fertility control and contraception pag. 71-83; Chapter 10 - Gynecological diseases of adolescence pag. 111-116; Chapter 15- Menopause pag. 165-184; Chapter 18- Hormonal therapies in gynecology pag. 205-210.
Part II - Obstetrics - Chapter 30 - Conception, implantation and placental development pag. 337-344; Chapter 31 - The placenta and fetal membranes pag. 347-354; Chapter 33- Maternal adaptations in pregnancy pag. 361-368; Chapter 34 - Pregnancy surveillance and assistance pag. 371-383; Chapter 36 - Labor and childbirth pag. 395-

- 414; Cap. 41- Prevention in obstetrics: preconceptional counseling pages 479-486; Chapter 49 - Diabetes and pregnancy pag. 583-595; Chap. 52- Hypertension and pre-eclampsia pag. 625-639 - Required
- Physiological pregnancy - guideline 20 - National System for Guidelines (SNLG- ISSN- Ministry of Health, CeVEAS), pages 23-38; 51-76; 169-180; 187-195. Date of publication: November 2010, Date of update: November 2014 Available on the website <http://www.snlg-iss.it> - Mandatory
 - LEA 2017 – Specialized services for the protection of responsible motherhood, free for preconception function and Free specialized services for the control of physiological pregnancy. 18-3-2017 Suppl. ordinary n. 15 to the OFFICIAL JOURNAL General series - n. 65 – Required
 - Internal Guidelines on Birth - LG.004 p. 1-161, Rev. 2, 06/28/2022. Available on CatFlow <https://catflow-webdyn.policlinicogemelli.it/> or on IntranetFPG <http://intranet.policlinicogemelli/> - Required
 - Teaching supports used during the lessons (slides, articles)
 - Nutrition during pregnancy and breastfeeding - Recommendations SIGO, AOGOI, AGUI, Confalonieri Ragonese Foundation, page 1-75, June 2018 – Recommended
 - Guidelines for proper nutrition - CREA Food and Nutrition Research Center, 2018 pag. 21-229 - Recommended

Internal Medicine / Spuntarelli Valerio

Compendio di medicina interna. Dietisti e fisioterapisti. (Autori L.A. Ferrara et al.)

Internal Medicine (Geriatrics) / Landi Francesco

- Teaching supports used during the lessons (slides, articles)
- “Food and nutrition in the elderly. Evaluation, prevention and clinical practice” Mariangela Rondanelli, 2014
- “The molecular basis of human nutrition” Giuseppe Arienti, 1996

The texts indicated are useful references for the study of the topics covered by the program

Pediatrics (Neonatology) / Cota Francesco

The texts indicated are optional; further material will be distributed during the lessons.

- “Reference levels of nutrient and energy intake for the Italian population”. IV revision, 2014.

Students are strongly encouraged to adopt independent approaches to learning and use of scientific articles or guidelines in Italian or English available on the internet.

Developmental Pediatrics / Valentini Piero

The texts indicated are useful references for the study of the topics covered by the program, some of which will be treated in class with the aid of slides that will subsequently be provided to the students

- "Manual of Pediatric Gastroenterology". Lo Giudice M, Bottaro G, Santucci A, Montanari G. Springer Italy 2007 (provided in digital format – For consultation only)
- "Pediatrics" De Martino M. EdiSES, Naples, 2012 (Selected chapters related to the topics covered)

4. LEARNING OBJECTIVES

Gynecology and obstetrics / Masini Lucia

Regarding the main issues (physiology and endocrinology of the menstrual cycle, puberty and menopause; main alterations of the menstrual cycle; preconception prevention, physiology of pregnancy, childbirth, puerperium and breastfeeding; diabetes in pregnancy, anemia in pregnancy and pre-eclampsia; interference of hormone therapy with physiology and metabolism, hints of hormonal therapy in particular conditions; importance of diet and nutritional advice in the various ages of a woman's life: prepubertal, fertile age, pregnancy, menopause, senility), at the end of the course the student must acquire knowledge and understanding of the physiology of the menstrual cycle and its alterations in the various ages of women (from puberty to menopause), of low-risk pregnancy, for the assessment of physiological childbirth and puerperium. They must also acquire knowledge and understanding applied to diagnostic and therapeutic pathways in the field of gynecology and pregnancy, even in particular "critical", non-physiological conditions (for example, diabetes in pregnancy). He will have to acquire autonomy of judgment, in the sense that he must possess a wealth of knowledge that allows him to express autonomous judgments in practical situations. Acquire communication skills, in the sense of being able to speak both with the team of specialists, such as experienced and non-expert doctors, obstetricians and nurses, as well as with gynecological and obstetric patients and relatives (spouse, parents, etc.). Finally, with regard to the ability to learn, he must develop the ability to deepen the knowledge acquired, to independently carry out further studies, both through bibliographic research and proposed research protocols, and by participating in ongoing research projects.

Internal Medicine/Spuntarelli Valerio

The student must be able to:

- acquire knowledge and understanding of the major nutritional, physical and clinical problems with internal management
- acquire knowledge and understanding skills applied in the sense that he must be able to frame the clinical picture and the nutritional status of the patient and be able to estimate the energy-protein needs, so as to draw up an adequate nutritional plan taking into account the habits diet, comorbidities and drug therapy of the subject
- acquire autonomy of judgment in the sense that he must possess

a wealth of knowledge that allows him to express autonomous judgments in practical situations

- acquire communication skills in the sense that he must be able to interact with both doctors and nurses using his own skills and ideas also to deal with problems and propose his solutions
- acquire the ability to learn in the sense that they must be able to deepen the knowledge acquired in order to independently undertake subsequent studies through bibliographic research and the production of research protocols

Internal Medicine (Geriatrics) / Landi Francesco

Regarding these main issues:

Sarcopenia in the elderly; Diagnosis and prevention of sarcopenia and disability in the geriatric age; Nutritional requirements in terms of micro and macronutrients; Nutritional screening and assessment in the elderly; Identification and treatment of malnutrition;

the student must be able to:

- acquire knowledge and understanding of the major nutritional, physical and clinical problems that mainly concern the elderly population (over 70 years)
- acquire knowledge and understanding skills applied in the sense that he must be able to frame the clinical picture and the nutritional status of the patient and be able to estimate the energy-protein needs, so as to draw up an adequate nutritional plan that takes into account dietary habits , the subject's comorbidities and pharmacotherapy.
- acquire autonomy of judgment in the sense that he must possess a wealth of knowledge that allows him to express autonomous judgments in practical situations
- acquire communication skills in the sense that he must be able to speak both with specialists, such as doctors and nurses, using his own skills and ideas also for address problems and envision their solution
- acquire the ability to learn in the sense that they must be able to deepen the knowledge acquired in order to independently undertake subsequent studies through bibliographic research and the production of research protocols

Pediatrics (Neonatology) / Cota Francesco

Regarding these main issues:

immediate and long-term advantages of breastfeeding in both mother and baby, risks of transmitting infectious diseases with breast milk, side effects of drugs taken by the mother during breastfeeding, methods of storing breast milk, use of breast milk in the preterm infant, characteristics of the different types of formula and cow's milk, weaning modalities, the student must be

capable to

- acquire knowledge and understanding and acquire applied knowledge and understanding skills, in the sense that he must be able to face concrete situations both practically and professionally also through arguments and problem solving;
- acquire autonomy of judgment, in the sense that he must possess a wealth of knowledge that allows him to express autonomous judgments in practical situations;
- acquire communication skills, in the sense that he must be able to speak with both specialists, such as experienced and non-expert doctors and nurses, such as parents and relatives of children, using his / her skills and ideas also to tackle problems and envision their solution;
- acquire the ability to learn, in the sense that he must be able to deepen the knowledge acquired in order to independently undertake subsequent studies through bibliographic research and the production of research protocols

Developmental Pediatrics / Valentini Piero

As regards the topics covered in class and those not covered, but included in the study plan, the student must:

- acquire knowledge and understanding of the characteristics of the child, of the pathophysiological differences compared to the adult and in the different stages of growth and of the diagnostic methods related to the various pathological areas discussed;
- acquire knowledge and ability of applied understanding of diagnostic-therapeutic procedures, with particular regard to invasive procedures, their indications and the information that may derive from them;
- acquire autonomy of judgment in the evaluation of nutritional problems and the gastrointestinal system, interacting and collaborating with medical specialists who directly follow the patient;
- acquire communication skills that allow an effective approach to the pediatric patient and his family, in particular in situations of malnutrition or chronic diseases in which it is more necessary to establish a trusting relationship with the client;
- acquire the ability to learn, in the sense of being able to become autonomous in the process of acquiring cultural bases, pursuing a study model that takes into consideration the use of the web to search for additional teaching material that favors a broader and more complete knowledge of the subject of study .

5. prerequisites

In order to understand the contents of the various courses of the integrated course, the student must possess the basic knowledge acquired both during high school education and during the first semester of the 1st year of the Degree Course.

6. TEACHING METHODS

- Knowledge and understanding: the most frequent clinical scenarios will be describe in technical language that will be explained as the presentation progresses;
- Applying knowledge and understanding: the intervention of students will be solicited, prompting them to identify problems that may arise in certain situations and requesting opinions and suggestions for their resolution;
- Making judgements: they will be confronted with possible obstacles in the performance of their duties and required indications for their prevention;
- Communications skills: the importance of dialectical and persuasive skills in dealing with complex patients, such as the elderly, or those unable to express themselves, such as pediatric ones or those involved in highly emotional situations, as happens to a woman who lives the period of motherhood, will be emphasized;
- Learning skills: the creation of a solid knowledge base, but, above all, of a learning method, will allow the student to continue to improve their cultural background, both notional and practical throughout their future working life.

7. OTHER INFORMATIONS

Telephone and / or telematic contact details of the teachers will be provided for communications and consultations of any kind

8. METHODS FOR VERIFYING LEARNING AND FOR EVALUATION

The student will be evaluated through an interview or a written test with multiple choice questions aimed at verifying the achievement of the objectives set by the 5 Dublin descriptors.

The number of questions proposed in the written tests may vary between 10 and 30: in relation to the number of questions proposed, the value of the single correct answer will vary so that the result of 30/30 can be achieved by those who answer all the questions correctly.

The evaluation of the oral exam will be entrusted to the teacher's judgement. The specific questions proposed to the student will be aimed at evaluating:

- the level of knowledge acquired and the ability to apply them to practical situations that will gradually be presented during the interview or written test,
- the ability to tackle clinical problems using reasoning and proposing possible solutions,
- the ability to use his or her wealth of knowledge by interacting, in a virtual way, with specialized and non-specialist professionals,

- the desire to deepen the topics studied independently, through bibliographic research, participation in research projects, dialogue with tutors during internships.

The vote will be made out of thirty. Each single module will weigh equally on the final evaluation. The student must obtain eligibility in all modules to achieve the overall assessment, always translated into thirty. The maximum score can be achieved by students who have demonstrated a solid notional knowledge, mastery of the topics and presentation skills in all modules.

9. program

Gynecology and obstetrics / Masini Lucia

- Outline of anatomy and embryology of the female genital system.
- Physiology of the menstrual cycle, fertilization and nesting. Puberty and menopause.
- Alterations in the menstrual cycle (amenorrhea, oligomenorrhea, obesity and menstrual cycle, hyperprolactinemia, thyroid and menstrual cycle). Polycystic ovary syndrome.
- Physiology of pregnancy: The placenta, local and general changes in pregnancy. Notes on childbirth. Physiology of the puerperium and lactation. Diet during pregnancy in physiological and pathological conditions. Anemias in pregnancy, diabetes in pregnancy, preeclampsia.
- Diet and nutritional advice in the various ages of a woman's life: prepubescent, fertile age, pregnancy, menopause, senility). Notes on birth regulation and contraception, and on the effects of hormonal therapies on the female organism.

Internal Medicine/Spuntarelli Valerio

- Metabolic syndrome
- Dyslipidemia and hypercholesterolemia
- Thyroidopathies
- Adrenal disorders
- Pituitary disorders
- Metabolic liver diseases

Internal Medicine (Geriatrics) / Landi Francesco

- Sarcopenia in the elderly and diagnostic tests (bio-impedancemetry, anthropometric measurements and DEXA scan).
- Nutritional screening and assessment in the geriatric age (identification of the state of pre-malnutrition or frank malnutrition).
- Physiological changes in body composition in the elderly.
- Physiological changes of the gastrointestinal system in the geriatric age.
- General aspects of energy-protein needs and micronutrient requirements in the calculation of a nutritional scheme in geriatric age.

Pediatrics (Neonatology) / Cota Francesco

- Introduction of the course and definitions in neonatology
- Macronutrients: digestion, absorption and assimilation
- Breastfeeding and artificial breastfeeding: from supporting the nursing mother to feeding the pathological infant
- The weaning of the infant
- The assessment of growth
- Common eating problems
- Nutrition and inborn errors of metabolism
- Breast milk banks.
- Breastfeeding with formula and cow's milk.
- Weaning modalities.

Pediatrics of the Evolutionary Age / Valentini Piero

- Growth and Development in the early stages of life
- Growth and nutritional status assessment
- Malnutrition: marasma, kwashiorkor, obesity
- Gastroesophageal reflux disease; Vomiting in the pediatric age
- The peptic disease
- Acute diarrhea
- Chronic diarrhea and malabsorption syndromes
- Chronic inflammatory bowel diseases
- Celiac disease
- Cystic fibrosis
- Diabetes
- Adverse food reactions
- Inherited Metabolic Disorders