Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology	
Course title: Physiology of the skin	
Teachers: Bosiljka A. Plećaš-Solarović	
Course status: mandatory	
Semester: I	Year of studies: I
ECTS points: 2	Course code: CKO3O1

Requirements: /

Course aims:

The aim of the course is to introduce the candidate with the structure and function of the skin and skin appendages with the particular aspect to the skin barrier and the factors affecting the skin ageing.

Course outcomes:

The candidate has knowledge on skin structure and function particularly the skin barrier and physiological aspects of skin ageing.

Course contents:

Lectures

The skin structure: anatomy and histology of epidermis and dermis. The extracellular skin matrix and its role. Skin as dynamic structure; Keratinocytes proliferation and role of cytokines; Epidermal response on skin barrier disruption and response mediators; Keratinocytes forming and arrangement; Melanogenesis and role of melanine; Skin circulation: blood and lymphatic vessels; Skin appendages: structure and function; Skin hair and its cycle; Nail; Sebaceous glands; Eccrine and apocrine sweat glands and their role; Skin function: barrier, in thermoregulation, endocrine, metabolic, sensorial, psychosomatic and immunological. Factors affecting the skin structure and function; The role of morphological and functional skin integrity in drug application: dermal, intradermal and subcutaneous. Skin ageing physiology. Chronological and photoageing of the skin. Histological changes at epidermal and dermal level during skin aging; Factors affecting skin ageing. Theories of ageing. The actual approaches in delaying/prevention: achievements and limitations.

Practical classes

Recommended literature:

- 1. Popović A, Petrović M. Fiziologija kože (skripta) 1991.
- 2. Pugliese PT. Physiology of the Skin II: Revised Edition. Allured Publishing Co., Carol Stream, Illinois, 2001.
- 3. Rigel DS, Weiss RA, Lim HW, Dover JS. Photoaging. Marcel Dekker, Inc. New York, Basel, 2004.
- 4. Timiras PS. Physiological Basis of Aging and Geriatrics, 4th edition. Informa Healthcare, USA, 2007.

The total of active learning classes

Lectures: 15	Practical classes:
Research work: 30	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work (IRW)

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70
Colloquia		Oral	
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Cosmetic ingredients

Teachers: Milić R. Jela, Savić D. Snežana, Krajišnik R. Danina, Petrović D. Silvana, Drobac M. Milica

Course status: mandatory

Semester: | Year of studies: |

ECTS points: 7 Course code: CKO3O2

Requirements: Legislation on cosmetic products

Course aims:

To introduce the candidate to ingredients of natural, semi-synthetic and synthetic origin that are allowed for preparation of diverse cosmetic products according to current legislation.

Course outcomes:

The candidate is familiar with the properties of cosmetic ingredients of diverse origin and chemical structure, their application in cosmetic products and effects they exert on the skin.

Course contents:

Lectures

Cosmetic ingredients of natural, semi-synthetic and synthetic origin – physicochemical characteristics, function in cosmetic products for the skin and its adnexes and their cosmetic effects; Emollients – application in cosmetic product and skin effects. Lipid materials (hydrocarbons, waxes, oils, butters, essential oils, fatty alcohols, fatty acids, semi-synthetic and synthetic esters); Silicones – silicone oils and silicone waxes; Surface active materials – properties, types, application in cosmetic products; Selection of surfactants relative to the use of a cosmetic product and its effect on skin and hair; Conventional surfactants and novel surfactants based on sugars, proteins, fatty acids and fatty alcohols; Non-ethoxylated surfactants; Biodegradable surfactants; Humectants; Polymers (thickeners, rheology modifiers and gelling agents); Preservatives; Antioxidants; Colours and pigments; Cosmetic actives – vitamins and derivatives, amino acids, peptides and proteins, plant extracts, coenzyme Q10, ingredients with moisturizing and specific cosmetic effects on the skin, hair, oral mucosa; UV-filters; Fragrances and aromas; Cosmetic ingredients with potential allergenic properties.

Practical classes

Recommended literature:

- 1. Vasiljević D, Savić S, Đorđević Lj, Krajišnik D. Priručnik iz kozmetologije. Beograd: Nauka, 2009.
- 2. Rieger MM. Harry's Cosmeticology. 8th ed., New York: Chemical Publishing Co., Inc., 2000.
- 3. Schlossman ML. Chemistry and Manufacture of Cosmetics: Cosmetic Specialties and Ingredients. Illinois: Allured Publishing Co., 2010.
- 4. Seifen, Öle, Fette, Wachse (journal specialized for cosmetology in EU selected articles), Verlag fuer Chemische Industrie H. Ziolkowsky GmbH, Germany (1995-2012).
- 5. Fiedler HP, Hoepfner E-M, Reng A, Schmidt P-C. Encyclopedia of excipients: for pharmaceuticals, cosmetics and related areas. 5th ed., ECV Editio-Cantor-Verlag, Germany, 2002.

The total of active learning classes

Lectures: 60	Practical classes:
Research work:	Other forms of teaching: 45

Teaching methods:

Lectures, interactive sessions, seminars.

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70
Colloquia		Oral	

Seminars	30
Other activities	

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Legislation on cosmetic products

Teachers: Vuleta M. Gordana

Course status: mandatory

Semester: | Year of studies: |

ECTS points: 3 Course code: CKO3O3

Requirements: non

Course aims:

To introduce the candidate with national and EU legislation on cosmetic products from the aspect of reaching production requirements, labeling, quality control, efficacy and safety.

Course outcomes:

The candidate has knowledge on national and EU legislation related to production, labeling, quality control and safety evaluation on cosmetic products.

Course contents:

Lectures

National legislation on cosmetic products: laws and directives; EU legislation on cosmetic products; Cosmetic directive 76/768 EEC and amendments; Regulation (EC) No 1223/2009 on cosmetic products; Cosmetic product technical information file; Annexes of cosmetic ingredients: allowed and no allowed; Nanomaterials in cosmetic products: labelling and requirements, cosmetic products safety evaluation (EU); Cosmetic product safety report (Annexs 1 of Regulation (EC) No 1223/2009); International names of cosmetic ingredients (INCI) and cosmetic product labeling requirements; INCI labelling of cosmetic ingredients (English and Latin); Allergens labelling in cosmetic products; Quality of organic and natural cosmetic products (Cosmos standard); Good manufacturing practice in cosmetic industry; REACH regulation-requirements related to cosmetic ingredients; Guidelines and directive of professional associations in the field of cosmetology; Cosmetovigilance: the role of cosmetologist.

Practical classes

Recommended literature:

- 1. Regulation (EC) No 1223/2009 Of The European Parliament and of the Concil of 30 November 2009 on cosmetic products, Official Journal of the European Union, L342/59- L342/209.
- 2. Cosmetics Directive 76/768/EEC i dopune.
- 3. Vasiljević D, Savić S, Đorđević Lj, Krajišnik D, Priručnik iz kozmetologije, Nauka, Beograd, 2009.
- 4. COSMOS-standard: Cosmetic organic and natural standard, Version 1.1–31st January 2011, COSMOS-standard AISBL, Brussels, Belgium (www.cosmos-standard.org).

The total of active learning classes

Lectures: 15	Practical classes:
Research work: 45	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work (IRW)

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70
Colloquia		Oral	
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Formulation, production and testing of cosmetic products

Teachers: Vuleta M. Gordana, Milić R. Jela, Savić D. Snežana, Primorac M. Marija, Vasiljević D. Dragana, Đekić M. Ljiljana,

Krajišnik R. Danina

Course status: mandatory

Semester: | Year of studies: |

ECTS points: 18 Course code: CKO3O4

Requirements: Cosmetic ingredients

Course aims:

Educating the students about the types and characteristics of cosmetic products for different purposes, their formulation, production and quality testing as well as efficacy assessment on skin and skin adnexa.

Course outcomes:

Knowledge of preformulation, formulation, production and testing of cosmetic products intended to come into contact with the various external parts of the human body (epidermis, hair, nails, lips and external genital organs) or with the teeth and the mucous membranes of the mouth, with the intention of cleaning or perfuming them, changing their appearance and/or correcting odors, protecting them or maintaining their good condition.

Course contents:

Lectures

Cosmetic products – definition and categories; Cosmetic emulsions – types, categories and ingredients; Preformulation, formulation, production and testing of emulsion lotions and creams for different purposes - theoretical and practical aspects; Cosmetic gels - types, categories and ingredients; Preformulation, production and testing of cosmetic gels for different purposes; Sun protection products – types, categories and ingredients; Preformulation, formulation, production products; Products for children – types, categories and ingredients; Preformulation, formulation, production and testing of products for children; Cosmetic products for men - types, categories and ingredients; Preformulation, formulation, production and testing of cosmetic products for men; Deodorants and antiperspirants - types, categories and ingredients; Preformulation, formulation, formulation, formulation, products for care of the mouth and oral cavity - types, categories and ingredients; Preformulation, formulation, production and testing of products for care of the mouth and oral cavity; Hair care and hair-cleansing products - types, categories and ingredients; Preformulation, formulation, production and testing of hair care and hair-cleansing products; Adverse effects on the skin caused by cosmetic products.

Practical classes

Formulation, production and quality testing of cosmetic products: emulsion lotions, creams, gels, solutions, pastes for washing/cleaning, care, protection, beautifying of the skin, hair, nails, lips, teeth and mucous membranes of the oral cavity as well as correcting of body odors.

Recommended literature:

- 1. Schlossman ML, Chemistry and Manufacture of Cosmetics: Cosmetic Specialties and Ingredients, Allured Publishing Co., Illinois 2010.
- 2. Vasiljević D, Savić S, Đorđević Lj, Krajišnik D, Priručnik iz kozmetologije, Nauka, Beograd, 2009.
- 3. Schrader K, Domsch A, Cosmetology Theory and Practice: Research Test Methods Analysis Formulas, Verlag für chemische Industrie, Augsburg, Germany, 2005.
- 4. Rosen, MR, Delivery System Handbook for Personal Care and Cosmetic Products, William Andrew Publishing, Norwich, N.Y., 2005.
- 5. Rieger MM, Harry's Cosmeticology., 8th ed., Chemical Publishing Co., Inc., New York, 2000.
- 6. Vuleta G, Kozmetologija, Nauka, Beograd, 1994.

The total of active learning classes

Lectures: 120	Practical classes: 60	
Research work: 90	Other forms of teaching: 45	
Teaching methods:		

Lectures, interactive sessions, practical classes, individual research work (IRW), seminars Grading system:			
Active participation in lectures		Practical	
Practical classes	10	Written	
Colloquia		Oral	70
Seminars	20		•
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Dermocosmetic preparations

Teachers: Savić D. Snežana, Vuleta M. Gordana

Course status: mandatory

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3O5

Requirements: Formulation, preparation and testing of cosmetic products

Course aims:

To introduce the candidate to legal/regulatory status of dermocosmetic products/cosmeceuticals and their application, active substances present in dermocosmetic preparations and types of these products, as well as their effects on the skin and its appendages.

Course outcomes:

The candidate is familiar with diverse ingredients needed for preparation of dermocosmetic preparations, types and effects of dermocosmetic preparations/cosmeceuticals, in particular products used in dermatological practice.

Course contents:

Lectures

Definition of dermocosmetic preparations/cosmeceuticals; Regulatory requirements concerning dermocosmetic preparations – guidelines for borderline products; Similarities and differences between a dermatological drug and a dermocosmetic preparation; Active substances in dermocosmetic preparations; Skin barrier function and physiological lipids for skin barrier regeneration and treatment of dry skin; Dermocosmetic preparations used in atopic dermatitis skin: skin washing, cleaning, care and protection; Dermocosmetic preparations for treatment of problematic and acne-prone skin; Dermocosmetic preparations for rosacea skin; Dermocosmetic anti-age preparations: formulations for prevention of signs of premature skin aging vs. formulations for treatment of photo-aged skin; Preparations for chemical peeling procedures; Fillers and mesotherapy preparations formulation; Dermocosmetic preparations for skin protection during and skin care after sun exposure; Dermocosmetic preparations for babies and children; Application of in vitro media in evaluation of active substances efficacy in dermocosmetic preparations; Principles of dermocosmetic preparations formulation development; Efficacy assessment of dermocosmetic preparations – clinical trials; Application of in vitro media in safety evaluation of cosmeceuticals; In vivo studies for evaluation of dermocosmetic preparations safety profiles; Novel approaches in the research of dermocosmetic preparations.

Recommended literature:

Practical classes

- 1. Schlossman ML. Chemistry and Manufacture of Cosmetics: Cosmetic Specialties and Ingredients. Illinois: Allured Publishing Co., 2010.
- 2. Vasiljević D, Savić S, Đorđević Lj, Krajišnik D. Priručnik iz kozmetologije. Beograd: Nauka, 2009.
- 3. Baumann L. Cosmetic dermatology: Principles and Practice (1st edition in Croatian). Zagreb: Interpreta, 2011.
- 4. Draelos ZD. Cosmeceuticals. 1st ed. Elsevier Saunders Philadelphia, 2005.
- 5. Seifen, Öle, Fette, Wachse (journal specialized for cosmetology in EU- selected articles), Verlag fuer Chemische Industrie H. Ziolkowsky GmbH, Germany (1995-2012).

The total of active learning classes

Lectures: 30	Practical classes:
Research work: 30	Other forms of teaching: 15

Teaching methods:

Lectures, interactive sessions, individual research work (IRW), seminars.

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70

Colloquia		Oral	
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Dermatology-selected chapters

Teachers: Vesić A. Sonja

Course status: mandatory

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3O6

Requirements: Physiology of the skin

Course aims:

The aim of the course is to introduce the candidate with morphology of the most common skin changes and skin efflorescences as well as skin types from cosmetologist viewpoint and allergic skin changes caused by the cosmetic products.

Course outcomes:

The candidate is able to recognize the morphology of the basic skin changes, skin efflorescences relevant from cosmetologist viewpoint, skin types and allergic changes on the skin caused by the cosmetic products.

Course contents:

Lectures

Morphology of basic skin changes; Clinical and pathohistological presentation of skin efflorescence relevant for cosmetology; Deseborrhoeic dermatoses; Verrucosus skin changes; Skin pigmentation disorders – skin dyschromias; Hyperpigmentation of the skin caused by drugs and cosmetic products; Trichosis – hypertrichosis, hypotrichosis (alopecia); Photodermatoses – causes, changes on the skin and adequate protection; Dermatoses caused by cosmetic products; Irritant (acute) contact dermatitis, allergic contact dermatitis, irritative (cumulative) contact dermatitis; Skin types from cosmetologist point of view - the behavior of the skin regarded to cosmetic ingredients; Comedogenicity of cosmetic product and testing methods; Effects of physical therapy to the skin; Patch tests; The European Series Standard Battery of allergens; Interpretation of patch tests; Cosmetic intolerance syndrome and status cosmeticus; Sensitive skin syndrome to various agents.

Practical classes

To introduce the candidate with the most common skin efflorescence relevant from cosmetologist viewpoint, skin types as well as allergic and other skin changes caused by the cosmetic products.

Recommended literature:

- 1. Karadaglić Đ. Dermatologija. Vojno izdavački zavod Verzal Pres, Beograd, 2000 (odabrana poglavlja).
- 2. Lalević B, Medenica Lj, Nikolić M. Dermatovenerologija sa dermatološkom propedevtikom, Savremena administracija, Beograd, 1997 (selected chapters).

The total of active learning classes

Lectures: 45	Practical classes: 15
Research work: 15	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, practical classes, individual research work (IRW)

Exam prerequisites	Points	Final exam	Points
Active participation in lectures	10	Practical	
Practical classes	20	Written	
Colloquia		Oral	70
Seminars			
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Marketing of cosmetic products

Teachers: Savić D. Snežana

Course status: elective

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3M1

Requirements: Formulation, production and testing of cosmetic products

Course aims:

To introduce the candidate to basic principles and particularities of cosmetic products' marketing, development of new cosmetic products and post-marketing surveillance of cosmetovigilance).

Course outcomes:

The candidate is familiar with basic and specific principles of cosmetic products' marketing, development of mass brands, development of new cosmetic products and cosmetovigilance.

Course contents:

Lectures

Basic principles of marketing; Marketing management; Market research; Particularities of cosmetic products' marketing; Marketing management in international cosmetic companies; Development of mass brands; Brand value and relationship with development of new cosmetic products; Development of local brands; Post-marketing surveillance of cosmetics - cosmetovigilance.

Practical classes

Recommended literature:

- 1. Tasić Lj. Farmaceutski menadžment i marketing. Beograd: Placebo, 2007.
- 2. Schlossman ML. Chemistry and Manufacture of Cosmetics: Cosmetic Specialties and Ingredients. Illinois: Allured Publishing Co., 2010.

The total of active learning classes

Lectures: 30	Practical classes:
Research work: 60	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work (IRW)

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	50
Colloquia		Oral	20
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Dermocosmetic and dermopharmaceutic preparations in pharmacy

Teachers: Savić D. Snežana, Vuleta M. Gordana, Milić R. Jela

Course status: elective

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3M2

Requirements: Dermocosmetic preparations, Formulation, production and testing of cosmetic products

Course aims:

To introduce the candidate with similarities and differences between dermocosmetic and dermopharmaceutic which are present or may be prepared in pharmacy store, particulary on those which are used in therapy i.e. treatment of pathological skin conditions (severe dry skin- ichthyosis, acnotic skin, skin rosacea, photoaged skin with hyperpigmentation) with their composition, formulation approaches, preparation procedures and expected effects.

Course outcomes:

The candidate is able to indentify the difference between dermocosmetic and dermopharmaceutic preparation which can be used in treatment in same pathological conditions; to recognize the composition of these preparations, the formulation and preparation procedures, as well as excepted positive and potential side effects of their application; to advice patient/consumer related to the use of dermocosmetic i.e. dermopharmaceutic preparations.

Course contents:

Lectures

Definition of similarities and differences between dermocosmetic and dermopharmaceutic preparations (legislation, composition, formulation approach, formulation procedure, expected effects); Dermopharmaceutic and dermocosmetic preparations for the skin with acne; Dermopharmaceutic and dermocosmetic preparations for the skin with rosacea; Dermocosmetic and dermopharmaceutic preparations for photoaged skin (hyperpigmentation treatment); Combination of dermopharmaceutic and dermocosmetic preparations for skin eczema.

Practical classes

Recommended literature:

- 1. Vasiljević D, Savić S, Đorđević Lj, Krajišnik D, Priručnik iz kozmetologije, Nauka, Beograd, 2009.
- 2. Baumann L, Kozmetička dermatologija: načela i praksa (prvo izdanje na hrvatskom jeziku), Interpreta usluge, Zagreb, 2011.
- 3. Vuleta G, Milić J, Primorac M, Savić S. Farmaceutska tehnologija 1. Univerzitet u Beogradu-Farmaceutski fakultet, Beograd, 2012.
- 4. Rosen, MR, Delivery System Handbook for Personal Care and Cosmetic Products, William Andrew Publishing, Norwich, N.Y., 2005

The total of active learning classes

Lectures: 30	Practical classes:
Research work: 60	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work (IRW), seminars

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	50
Colloquia		Oral	20
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



3.

Study programme: Cosmetology

Course title: Special-purpose cosmetics

Teachers: Primorac M. Marija, Vasiljević D. Dragana, Đekić M. Ljiljana, Krajišnik R. Danina

Course status: elective

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3M3

Requirements: Cosmetic ingredients; Formulation, production and testing of cosmetic products

Course aims:

Introduction in screening approach for ingredients/raw materials suitable for formulation of cosmetic products for special purposes (products for chemical treatment of hair, make-up products, perfumery products), their manufacturing and assessment of their quality and effects on the skin.

Course outcomes:

The students know formulation, preformuation, manufacturing and assessment of cosmetic products for special purposes: products for chemical treatment of hair, make-up products, and perfumery products.

Course contents:

Lectures

Lectures Cosmetic

products for chemical treatment of hair (hair colours, hair bleaching products, hair waving products, hair straightening products); Make-up products (make-up powders, blushes, lipstics, eye-shadows, mascaras, nail lacquers); Perfumery products (perfumes, toilet waters, eau de Cologne).

Practical classes

Recommended literature:

- 1. Schlossman ML. Chemistry and Manufacture of Cosmetics: Cosmetic Specialties and Ingredients, Allured Publishing Co., Illinois 2010.
- 2. Schrader K, Domsch A, Cosmetology Theory and Practice: Research Test Methods Analysis Formulas, Verlag für chemische Industrie, Augsburg, Germany, 2005.

Rieger MM, Harry's Cosmeticology., 2000, 8th ed., Chemical Publishing Co., Inc., New York.

4. Seifen, Öle, Fette, Wachse (специјалозовани часопис из козметологије за подручје ЕУ - одабрани радови), Verlag fuer Chemische Industrie H. Ziolkowsky GmbH, Germany (1995-2012).

The total of active learning classes

Lectures: 30	Practical classes:
Research work: 60	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work.

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70
Colloquia		Oral	
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Efficacy testing of cosmetic products

Teachers: Savić D. Snežana, Vesić A. Sonja

Course status: elective

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3И4

Requirements: Formulation, production and testing of cosmetic products; Dermatology – selected chapters

Course aims:

To introduce the candidate to skin and its appendages condition parameters that may be assessed in order to evaluate efficacy of diverse cosmetic products; to the type of studies involving human volunteers and applied statistics used in efficacy assessment of cosmetic products.

Course outcomes:

The candidate is familiar with the fundamentals of the techniques used for the assessment of diverse effects a cosmetic product may exert on the skin and its appendages, modes of data representation for marketing purposes, and is able to interconnect composition and properties of a cosmetic products with its declared effects.

Course contents:

Lectures

Approaches to design and organize in vivo studies on human volunteers for efficacy evaluation of cosmetic products, i.e. their diverse effects on skin and its appendages; Short-term and long-term studies for skin hydration assessment, skin barrier integrity (transepidermal water loss), skin pH, skin surface lipids content, erythema and melanin indices, mechanical properties of the skin (skin viscoelasticity); Interpretation of the results obtained and use of such data for marketing purposes.

Practical classes

Recommended literature:

- 1. Baumann L. Cosmetic dermatology: Principles and Practice (1st edition in Croatian). Zagreb: Interpreta, 2011.
- 2. Vasiljević D, Savić S, Đorđević Lj, Krajišnik D. Priručnik iz kozmetologije. Beograd: Nauka, 2009.
- 3. Draelos ZD. Cosmeceuticals. 1st ed. Elsevier Saunders Philadelphia, 2005.
- 4. Lodén M, Maibach HI. Dry skin and moisturizers. 1st ed. CRC Press Boca Raton, 2000.
- 5. Čajkovac M. Kozmetologija. Zagreb: Naklada Slap, 2005 (selected chapters).
- 6. Rieger MM. Harry's Cosmeticology. 8th ed., New York: Chemical Publishing Co., Inc., 2000.
- 7. Review and original articles in national and international journals: Arhiv za farmaciju, Int J Cosmet Sci, Cosmetic&Toiletries, SÖFW Journal, J Cosmet Dermatology, Skin Research&Technology.

The total of active learning classes

Lectures: 30	Practical classes:
Research work: 60	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work (IRW)

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70
Colloquia		Oral	
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology

Course title: Safety of cosmetic products and cosmetovigilance

Teachers: Savić D. Snežana, Antonijević M. Biljana

Course status: elective

Semester: || Year of studies: |

ECTS points: 5 Course code: CKO3I/15

Requirements: Legislation on cosmetic products; Formulation, production and testing of cosmetic products

Course aims:

The candidate is introduced to safety aspects of cosmetic products, most frequent adverse effects cosmetic products exerting on the skin or its appendages, types of in vitro and in vivo studies used in the safety assessment, as well as how to advise the user on safe application of cosmetic products and report an adverse effect of a cosmetic product.

Course outcomes:

The candidate is familiar with commonly used in vitro tests and in vivo approaches for safety profile assessment of a cosmetic product; is capable to advise the user on correct application of cosmetic products and how to act in case an adverse effect appears.

Course contents:

Lectures

Safety assessment of cosmetic ingredients; Safety assessment of final cosmetic products; In vitro tests for skin corrosion, irritation and sensitization assessment, alternative to animal tests; In vivo studies for the evaluation of certain safety aspects of skin care cosmetics; Nanomaterials and safety of the cosmetic products; Procedures for monitoring and report of cosmetic products' adverse effects in EU.

Practical classes

Recommended literature:

- 1. Regulation (EC) No 1223/2009 Of The European Parliament and of the Council of 30 November 2009 on cosmetic products, Official Journal of the European Union, L342/59- L342/209.
- 2. Baumann L. Cosmetic dermatology: Principles and Practice (1st edition in Croatian). Zagreb: Interpreta, 2011.
- 3. Draelos ZD. Cosmeceuticals. 1st ed. Elsevier Saunders Philadelphia, 2005.
- 4. Lodén M, Maibach HI. Dry skin and moisturizers. 1st ed. CRC Press Boca Raton, 2000.
- 5. Rieger MM. Harry's Cosmeticology. 8th ed., Chemical Publishing Co., Inc., New York, 2000.
- 6. Review and original articles in national and international journals: Arhif za farmaciju, Int J Cosmet Sci, Cosmetic&Toiletries, SÖFW Journal, J Cosmet Dermatology, Skin Research&Technology.

The total of active learning classes

Lectures: 30	Practical classes:
Research work: 60	Other forms of teaching:

Teaching methods:

Lectures, interactive sessions, individual research work (IRW).

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	70
Colloquia		Oral	
Seminars	30		
Other activities			

Specialized Academic Studies COSMETOLOGY



Study programme: Cosmetology				
Course title: Final work				
Teachers:				
Course status: mandatory				
Semester: II	Year of studies: I			
ECTS points: 15	Course code: CKO33P			

Requirements: all module courses

Course aims:

Final work/specialization work should present results of individual experimental work or literature overview related to the specific topic from the field of cosmetic ingredients, formulation approach, manufacture and testing of cosmetic products and dermocosmetic preparations employing theoretical and practical knowledge acquired during the studies.

Course outcomes:

The candidate is enabled to use the acquired knowledge for critical comprehension and analysis of available data and problems related to formulation development, manufacture/production and testing of cosmetic products and dermocosmetic preparations.

Course contents:

Lectures

To introduce the candidate with research methodology from the field relevant to the final work topic and corresponding literature overview; The final work could be experimental or bibliographic; The final work of experimental type contains following chapters: Introduction, Theoretical part, Experimental part, Results, Discussion, Conclusion and Literature; The final work of bibliographic type contains the following chapters: Introduction, Theoretical part, Analysis/discussion of literature data, Conclusion and Literature; After the final work is written in the corresponding form, the participant should access to the official public defense in front of the commission.

Practical classes

Recommended literature:					
The total of active learning classes					
Lectures:	Practical classes:				
Research work:	Other forms of teaching:				
Teaching methods:					
Grading system:					

Exam prerequisites	Points	Final exam	Points
Active participation in lectures		Practical	
Practical classes		Written	100
Colloquia		Oral	
Seminars			
Other activities			