

**UČNI NAČRT PREDMETA / COURSE SYLLABUS**

<b>Predmet:</b>	Fotografija in računalniška grafika
<b>Course title:</b>	Photography and Computer Graphics

<b>Izobraževalni program in stopnja Educational programme and level</b>	<b>Študijska smer Study field</b>	<b>Semester Semester</b>
<b>Neformalno izobraževanje: FUDŠ AKADEMIJA:</b> Mediji in novinarstvo v praksi / <b>Non-formal education: SASS ACADEMY:</b> Media and Journalism in Practice	Media and Journalism	Prvi / First
<i>Nivo: visokošolski strokovni študijski program (VS) / Level: higher professional study programme (BA)</i>		

**Vrsta predmeta / Course type** obvezni / obligatory

**Univerzitetna koda predmeta / University course code:**

<b>Predavanja Lectures</b>	<b>Seminar Seminar</b>	<b>Vaje Tutorial</b>	<b>Klinične vaje work</b>	<b>Druge oblike študija / Other forms of Study</b>	<b>Samost. delo Individ. work</b>	<b>ECTS</b>
10		60			170	8

**Nosilec predmeta / Lecturer:** pred. Matej Kolaković / Lect. Matej Kolaković

<b>Jeziki / Languages:</b>	<b>Predavanja / Lectures:</b>	slovenščina, angleščina / Slovene, English
	<b>Vaje / Tutorial:</b>	slovenščina, angleščina / Slovene, English

**Pogoji za vključitev v delo oz. za opravljanje študijskih obveznosti:**

**Prerequisites:**

Študent/študentka mora pred pristopom k izpitu imeti pozitivno ocenjeno seminarsko delo.

Positively evaluated seminar work is prerequisite for exam.

### **Vsebina:**

- Fizikalne osnove fotografije: svetloba kot valovanje, svetila in barvni spektri, absorpcija in odboj svetlobe, geometrijska optika: lom in sipanje svetlobe, leče, fizikalni faktorji v zaznavanju in beleženju barve.
- Opis in zapis barv: barvni modeli, pigmenti, senzorji, filtri.
- Oko in vid: zgradba očesa, procesiranje slik, vpliv svetlobe in barv na psiho.
- Zgodovina in razvoj fotografije.
- Vizualni jezik fotografije, umetnost fotografije.
- Osnove klasične/analogne in digitalne fotografije.
- Fotografska tehnologija: deli fotoaparata, zrcalno refleksni fotoaparati (SLR), objektiv, kompaktni fotoaparati, digitalni fotoaparati, svetila, filtri, druga oprema.
- Fotografske metode in tehnike: izbor opreme, zajem slike/kompozicija, obvladovanje svetlobe: naravna in umetna osvetlitev, subjekti fotografije, vrste fotografije.
- Strojna in programska oprema za digitalno fotografijo in obdelavo fotografij.
- Digitalna obdelava slik, priprava slik za različne medije.
- Elementi grafičnega oblikovanja; Linija, velikost, oblika, tekstura, barva & barvne sheme, anatomija črke, tipografski standardi.
- Principi grafične kompozicije; Ravnovesje, kontrast, poudarek, ritem, vzorec, enotnost, raznolikost.
- Konceptualizacija grafičnih podob - korporativno oblikovanje; Pregled osnovnih načel in oblik; Oblikovanje plakatov, zloženek in sorodnih izdelkov.
- Vizualna organizacija in tehnike integracije tipografije in fotografije.
- Interpretacija vizualnih elementov tipografije, slike, fotografije in njihove

### **Content (Syllabus outline):**

- Physical photo basics: light as wave, light and colour spectra, absorption and reflection of light, geometrical optics: refraction and dispersion of light, lenses, physical factors in the sensing and recording of colour.
- Description and encoding of colours: colour models, pigments, sensors, filters.
- Eye and vision: the structure of the eye, the processing of images, the influence of light and colors on the psyche.
- History and development of photography.
- Visual language of photography, art of photography.
- Basics of classic / analog and digital photography.
- Photo technology: parts of the camera, reflex/SLR cameras, lenses, compact camera, digital camera, light sources, filters, other equipment.
- Photographic methods and techniques: equipment selection, image / composition capture, light control: natural and artificial lighting, photo subjects, genres of photographs.
- Hardware and software for digital photography and photo processing.
- Digital image processing, picture preparation for various media.
- Elements of Graphic Design; Line, shape, size, texture, color & color scheme, the anatomy of a letter, typographic standards.
- Principles of composition in Graphic design ; balance, contrast, emphasis, rhythm, pattern, unity, variety.
- Conceptualizing graphic imagery - Corporate design; Overview of basic principles and forms; Poster/brochure and related product design.
- Visual organization, typography and photography integration techniques .
- Interpretation of the visual elements of typography, image, photography and their articulation in the context of different genre concepts.

artikulacije v kontekstu različnih žanrskih konceptov.

- Nove smeri grafičnega dizajna v kontekstu interdisciplinarnega oblikovanja.

- New directions of graphic design in the context of interdisciplinary design.

### **Temeljni literatura in viri / Readings:**

London, Barbara, Stone, Jim, Upton, John. 2016. *Photography (12th Edition)*. Pearson.

Adobe Photoshop CC for Photographers: A Professional Image Editor's Guide to the Creative use of Photoshop for the Macintosh and PC by Evening, Martin. Taylor and Francis, 2013.

Langford, Michael, Fox, Anna, Sawdon Smith, Richard. 2010. *Langford's Basic Photography: The Guide for Serious Photographers (9th Edition)*. Elsevier Science.

Flusser, Vilem. 2011. *K filozofiji fotografije*. ZSKZ.

Hočvar, Uroš. 2010. *Estetika reportažne fotografije*. MASKA: Ljubljana.

### **Cilji in kompetence:**

Cilj predmeta je študente seznaniti s fizikalnimi osnovami fotografije, zgodovino fotografije, fotografsko tehnologijo, tehnikami in zvrstmi fotografije ter digitalnimi tehnikami grafičnega oblikovanja. Predmet usmerja pozornost k iskanju povezav med fotografskim medijem in grafičnim dizajnom ter njuno oblikovno - percepcijsko transformacijo skozi čas in medijsko evolucijo.

Učna enota prispeva k razvoju naslednjih splošnih in predmetno-specifičnih kompetenc:

Splošne kompetence:

- sposobnost fleksibilne uporabe znanja v praksi;
- poznavanje pomena kakovosti in prizadevanje za kakovost strokovnega dela

### **Objectives and competences:**

The objective of the course is to acquaint students with the physical basics of photography, the history of photography, photographic technology and techniques, the types of photography and digital graphic design techniques. The course directs students to seek correspondences between photography media and graphic design and their conceptual and perceptual transformation over time and media evolution.

The instructional unit contributes to the development of the following general and subject-specific competences:

General competences:

- ability of the flexible use of knowledge in practice;

skozi avtonomnost, (samo)kritičnost, (samo)refleksivnost in (samo)evalviranje v strokovnem delu;

- sposobnost reševanja konkretnih problemov v poklicnem okolju;
- razvoj kritične in samokritične presoje;
- sposobnost fleksibilne uporabe znanja v praksi;
- etična refleksija in zavezanost profesionalni etiki v družbenem okolju z vestnim spoštovanjem načela resnicoljubnosti, svobode, odgovornosti, odprtosti, strpnosti, pluralizma, ustvarjalnosti, izvirnosti, uravnoteženosti, pravičnosti, poštenosti;

Predmetno-specifične kompetence:

- poznavanje in obvladovanje procesov in tehnik kreativnega ustvarjanja medijskih vsebin;
- razvoj veščin in spretnosti pri uporabi znanja na področju medijev s pomočjo reševanja teoretičnih, empiričnih ali praktičnih problemov;
- poznavanje in smiselna uporaba digitalne fotografske opreme in osnovnih fotografskih tehnik;
- razumevanje in uporaba osnovnih orodij za digitalno obdelavo fotografij za pripravo fotografskega dela za objavo;
- poznavanje in smiselna uporaba terminologije, konceptov in kategorij, ključnih področij in medsebojnih razmerij med fotografskim medijem in grafičnim oblikovanjem;
- teoretično in praktično znanje za pravilno in profesionalno uporabo različnih elementov fotografije v procesu oblikovanja vizualnih sporočil;
- zavest o grafičnem oblikovanju kot povezovalnem elementu med fotografskim medijem in sodobnimi tehnikami oblikovanja.

- knowledge of the importance of quality, and striving for quality professional work through autonomy, (self-) criticism, (self-) reflexivity and (self-) evaluation of professional work;
- ability to solve concrete problems in the professional environment;
- development of critical and self-critical judgment;
- ability to flexibly apply knowledge in practice;
- ethical reflection and commitment to professional ethics in the social environment with conscientious respect for the principle of truthfulness, freedom; responsibility, openness, tolerance, pluralism, creativity, originality, balance, fairness, honesty;

Course -specific competences:

- knowledge and mastery of processes and techniques of creative creation of media content;
- development of skills in the application of knowledge in the field of media through the solution of theoretical, empirical or practical problems;
- knowledge and meaningful use of digital photographic equipment and basic photography techniques;
- understanding and use of basic digital photo processing tools to prepare photographic work for publication;
- knowledge and meaningful use of terminology, concepts and categories, key areas and mutual relationships between photography media and graphic design;
- theoretical and practical knowledge for the correct and professional use of different elements of photography in the process of creating visual messages;
- awareness of graphic design as a link between photography media and modern design techniques.

**Predvideni študijski rezultati:**

Študent/študentka:

- Ima znanje o trenutnih in preteklih razvojnih trendih s področja fotografije in grafičnega oblikovanja;
- Pozna osnove klasične in digitalne fotografije;
- Pozna opremo in programsko opremo za digitalno fotografijo in obdelavo fotografij;
- Razume proces grafičnega oblikovanja ter njegovo fleksibilno uporabo v kontekstu fotografskega medija;
- Zna oblikovati kompleksne grafične izdelke;
- Lahko poda strokovne razloge za odločitve, ki jih je sprejel v procesu razvijanja interdisciplinarnega projekta;
- Razume pomen tipografije in barvnih shem v oblikovalskem procesu;
- Zna pripraviti, implementirati in optimizirati raznovrstne elemente fotografije in vizualne elemente drugih sorodnih oblikovnih področij upoštevajoč najvišje profesionalne standarde;
- Pozna oblikovalske postopke v tiskanih medijih in njihove posebnosti.

**Metode poučevanja in učenja:**

- Predavanja z aktivno udeležbo študentov (razlaga, diskusija, vprašanja, primeri, reševanje problemov);
- Vaje (laboratorijsko in terensko delo s fotografsko opremo in programsko opremo za obdelavo slik);
- Oblikovanje portfolia in samostojen študij (motiviranje, usmerjanje, samoopazovanje, samouravnavanje, refleksija);
- Uporaba spletne učilnice oziroma drugih sodobnih IKT orodij.

**Načini ocenjevanja:****Intended learning outcomes:**

Students:

- Have knowledge of the current and past development trends in photography and graphic design;
- Know the basics of classical and digital photography;
- Are familiar with the equipment and software for digital photography and image processing;
- Understand the graphic design process and its flexible use in the context of photography media;
- Can design complex graphic design products;
- Can provide professional justifications for the decisions made during the interdisciplinary design development process;
- Understand the importance of typography and color schemes in design process;
- Can prepare, implement and optimize various elements of the photography and visual elements of other related design areas, taking into account modern professional standards;
- Are familiar with design procedures in print media and their specifics.

**Learning and teaching methods:**

- Lectures with students' active participation (explanation, discussion, questions, examples, problem solving);
- Tutorial (laboratory and field work with photographic equipment and image processing software);
- Creation of portfolio and independent study (motivation, guidance, self-observation, self-regulation, reflection);
- Use of online classroom or other contemporary ICT tools.

**Assessment:**

<p>Način (pisni izpit, ustno izpraševanje, naloge, projekt):</p> <ul style="list-style-type: none"> <li>• pisni izpit in ustni zagovor</li> <li>• seminarsko delo (grafični izdelek)</li> </ul> <p>Ocenjevalna lestvica – skladno s Pravilnikom o preverjanju in ocenjevanju znanja.</p>	<p>Delež (v %) / Weight (in %)</p> <p>50%</p> <p>50%</p>	<p>Type (examination, oral, coursework, project):</p> <ul style="list-style-type: none"> <li>• written examination with oral defense</li> <li>• seminar work (graphic artwork)</li> </ul> <p>Grading is in accordance with the Faculty's evaluation Ordinance.</p>
<p><b>Reference nosilca / Lecturer's references:</b></p>		
<p>Predavatelj ima večletne bogate izkušnje na področju fotografskem in video področju ter področju oblikovanja spletni strani. / The lecturer has several years of rich experience in the field of photography and video and in the field of website design.</p> <p>Med leti 2008 in 2011 je delal na 25 različnih znanstvenih konferencah po Evropi, Severni ameriki, Bližnjem vzhodu in Avstraliji kot snemalec in vodja snemalne ekipe za Inštitut Jožef Stefan in njihov spletni portal Videlectures.net. Med svojimi pohodi po gorah je ustvarjal čudovite fotografije narave, za posameznike in podjetja portretne fotografije in fotografije za oglase. Vsako leto je fotografiral proke in koncerte. Skozi leta je v svoj fotografski repertuar dodal tudi produktno fotografijo in fotografiranje napremičnin. Leta 2011 je odprl svoje podjetje in svetu ponudil svoje ustvarjalne storitve na področjih fotografije, videa in oblikovanja spletnih strani, v okviru katerega sodeluje z domačimi in tujimi naročniki. V letu 2016 je ustanovil lasten foto studio - Lightspark Studio. Leta 2017 je bil vabljen kot predavatelj na TEDx dogodek na Fakulteti za družbene vede. Predaval je o svoji ustvarjalno-podjetniški poti, kako iz lastnega navdušenja zgraditi posel. Leta 2019 je oblikoval svoj tečaj fotografije in hkrati začel mentorirati mlade fotografe ob strokovnih in podjetniških izzivih, ki jih samostojna pot prinese. / Between 2008 and 2011, he worked at 25 different scientific conferences in Europe, North America, the Middle East and Australia as a cameraman and head of the recording team for the Jožef Stefan Institute and their online portal Videlectures.net. During his hikes in the mountains, he created beautiful nature photos, portrait photos for individuals and companies, and photos for advertisements. He photographed weddings and concerts every year. Over the years, he has also added product photography and property photography to his photographic repertoire. In 2011, he started his own company and offered his creative services to the world in the fields of photography, video and website design where he cooperates with domestic and foreign clients. In 2016, he founded his own photo studio - Lightspark Studio. In 2017, he was invited as a lecturer at the TEDx event at the Faculty of Social Sciences. He gave a lecture about his creative-entrepreneurial journey and how to build a business out of his own enthusiasm. In 2019, he designed his photography course and at the same time started</p>		

mentoring young photographers with the professional and entrepreneurial challenges that the independent path brings.