


## MODULE HANDBOOK

	<b>UNIVERSITAS PADJADJARAN</b> <b>FACULTY OF MATHEMATICS AND NATURAL SCIENCES</b> <b>BACHELOR OF BIOLOGY PROGRAMME</b>	<b>COURSE CODE :</b> <b>D10D-50602</b>
<b>Module designation</b>	Digitalization of Biological Objects	
<b>Semester in which the module is taught</b>	5	
<b>Persons responsible for the module</b>	<ol style="list-style-type: none"> <li>1. Dr. Budi Irawan, M.Si</li> <li>2. Dr. Eneng Nunuz Rohmatullayaly, M.Si</li> <li>3. Dr. Madihah, S.Si., M.Si</li> </ol>	
<b>Medium of instruction</b>	Indonesian	
<b>Relation to curriculum</b>	Compulsory course of interest of specialization	
<b>Teaching methods</b>	Lectures, discussion, and collaborative learning	
<b>Workload</b>	<p>Total workload : 5440 minutes = 90.67 hour</p> <p>Lectures, discussion, and collaborative learning : 2 x 50 minutes x 16 weeks = 1600 minutes = 26.67 hours</p> <p>Exercises : 2 x 60 minutes x 16 weeks = 1920 minutes = 32 hours</p> <p>Self-study : 2 x 60 minutes x 16 weeks = 1920 minutes = 32 hours</p>	
<b>Credit points</b>	2.00 (3.62 ECTS)	
<b>Required and recommended prerequisites for joining the module</b>	Plant Structure and Development 1	
<b>Module objectives/intended learning outcomes</b>	<ol style="list-style-type: none"> <li>1. Know and understand documentation techniques in plant, animal and photomicrograph objects</li> <li>2. Know and understand object videography techniques plants, animals and photomicrographs</li> <li>3. Know and understand the recording of plant objects, digital animals and photomicrographs</li> </ol>	
<b>Contents</b>	This course studies techniques for digitalizing animals and plants both microscopically (photomicrographs) and macroscopically. Documentation techniques are carried out on living or preserved specimens in the form of illustrations/sketches, photos, sound recordings and/or videos for scientific research purposes. Apart from that, this course studies how the results of digitalization can be presented in an information system/database so that they can be accessed by researchers, academics and the wider community in supporting the creation of digital museums and global knowledge exchange.	
<b>Examination forms</b>	Quiz, Midterm exam, Assignment, and Final exam	
<b>Study and examination requirements</b>	The minimum attendance in lectures is 80%. Final grades are evaluated based on quiz (20%), midterm exam (30%), assignment (20%), and final exam (30%)	
<b>Reading lists</b>	<ol style="list-style-type: none"> <li>1. Bridson D and Forman L. 1992. Herbarium Handbook. Kew: Royal Botanic Garden</li> <li>2. Glimm-lacy J and Kaufman PB. 2006. Botany Illustrated. New york: Spinger</li> <li>3. IBIS. 2014. Indonesian Biodiversity System. Bogor: Research Center For Biology, LIPI</li> <li>4. Horan A. G. 2013. Digital Heritage: Digitization of Museum and Archival Collections. Research papers. Paper 374. <a href="http://opensiuc.lib.siu.edu/gs_rp/374">http://opensiuc.lib.siu.edu/gs_rp/374</a></li> <li>5. Stow, A. 2011. Digitisation of Museum Collections. A Worthwhile Effort?. Graduating Thesis, BA/Sc. University Of Gothenburg: Department of Conservation.</li> <li>6. Museu Del Ter. 2020. Coneix el riu. [terhubung berkala]. <a href="https://coneixelriu.museudelter.cat/index.php">https://coneixelriu.museudelter.cat/index.php</a>. [diakses 10 Juli 2020]. Barcelona: Maleu.</li> <li>7. Google. 2020. Google Arts &amp; Culture. [terhubung berkala]. Google Arts &amp; Culture. [diakses 10 Juli 2020].</li> <li>8. Aguiar, J.J.M. 2017. On the use of photography in science and taxonomy: how images can provide a basis for their own authentication. Bionomia, 12:44-47.</li> <li>9. Nathan, T. R. 2011. Photography and Science by Kelley Wilder. Visual Resources(Reviews), 27(4): 1-7</li> </ol>	