

PHOTOGRAPHY (PHOT)

PHOT A100 2 Units (36 lecture hours; 18 lab hours)

Basic Digital Photography

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU

Designed to help the photo enthusiast increase their visual literacy, increase knowledge of the historic use of photographs in all aspects of society, and to take better pictures. A practical foundation in the use of digital cameras will be introduced, including exposure, composition, lighting, color, as well as, current methodology of image processing. A strong foundation of the historic context of photographs will be provided as a way of students learning to develop their ability to communicate through their images and to place them in context, to analyze, and evaluate photographs. Graded or Pass/No Pass option.

PHOT A101 3 Units (54 lecture hours)

Photography and Society

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU; UC.

Lecture/discussion class that explores how photographs function in society, and, in turn, how society determines our visual environment. Images will be analyzed in context of the total photographic milieu: news, advertising, snapshots, art, the internet, TV, etc. How photographs function as evidence, demonstrations of desire, historical memory, cultural values, propaganda, and surveillance will be examined. The manufacturing of personal identity and cultural history through photographic artifacts will be emphasized. Fulfills "100" elective course requirement for Photography Certificate of Achievement. Graded or Pass/No Pass option.

PHOT A102 1 Unit (18 lecture hours)

Careers in Photography

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Introduction to careers in photography and the Photography program at Orange Coast College. Recommended to anyone interested in pursuing photography as a career goal. Graded or Pass/No Pass option.

PHOT A104 2 Units (36 lecture hours)

Smartphone Landscape and Nature Photography

Grading Mode: Pass/No Pass, Standard Letter

Transfer Credit: CSU.

Smartphone Landscape and Nature photography is a course introducing photography concepts, landscape concepts and camera features unique to smartphone photography. The course focuses on lighting, composition, current trends, demonstrations, discussions, critiques, information resources, and smartphone capabilities. Students will plan and produce their own projects. Each student will provide their own smartphone. Graded or Pass/No Pass option.

PHOT A106 2 Units (36 lecture hours)

Smartphone Portrait Photography

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Smartphone portrait photography is a course introducing photography concepts, portrait concepts, lighting and posing as well as camera features unique to smartphone photography. The course focuses on demonstrations, discussions, critiques, information resources, lighting, portrait trends and smartphone capabilities. Students will plan and produce their own portrait projects. Each student will provide their own smartphone. Graded or Pass/No Pass option.

PHOT A107 2 Units (36 lecture hours)

Smartphone Street Photography

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Smartphone street photography is a course introducing photography concepts, street lighting, visual communication skills, documentary, visual story telling, as well as camera features unique to smartphone photography. The course focuses on demonstrations, discussions, information resources, lighting and current photography trends. Students will plan and produce their own street photography photo projects. Each student will provide their own smartphone. Graded or Pass/No Pass option.

PHOT A108 2 Units (36 lecture hours)

Smartphone Food Photography

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Smartphone food photography is a course introducing photography concepts, food styling concepts and camera features unique to smartphone photography. The course focuses on demonstrations, discussions, information resources, lighting and current food photography trends. Students will plan and produce their own food photography photo projects. Each student will provide their own smartphone. Graded or Pass/No Pass option.

PHOT A109 2 Units (36 lecture hours)

Smartphone Fashion Photography

Grading Mode: Standard Letter, Pass/No Pass

Transfer Credit: CSU.

Smartphone fashion photography is a course introducing photography concepts, fashion concepts and camera features unique to smartphone photography. The course focuses on demonstrations, discussions, critiques, information resources, lighting, fashion trends and smartphone capabilities. Students will plan and produce their own projects. Each student will provide their own smartphone. Graded or Pass/No Pass option.

PHOT A110 3 Units (54 lecture hours)**Photography with a Smartphone: Theory and Practice****Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU; UC: Credit Limitation: PHOT A110 and PHOT A123 combined: maximum credit, 1 course.

This course explores the historical development of photography with a focus on important figures and their work. It is also the study of photography as art and aesthetic experience. In addition to the historical context, students will learn to use their smartphones as sophisticated cameras as well as digital editing techniques in order to enhance their ability to create, compose and evaluate photographs. Graded or Pass/No Pass option.

PHOT A111 2 Units (36 lecture hours)**Smartphone Product Photography****Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Smartphone product photography is a course introducing photography concepts, product and still-life concepts and camera features unique to smartphone photography. The course focuses on Lighting, propping and sets, composition, demonstrations, discussions, critiques, information resources, product photography trends and smartphone capabilities. Students will plan and produce their own projects. Each student will provide their own smartphone. Graded or Pass/No Pass option.

PHOT A120 3 Units (36 lecture hours; 72 lab hours)**Introduction to Photography****Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU; UC.

Introduction to analog photography as a creative art with an emphasis on using the camera as a means of communication and personal expression. Topics include, the discussion and demonstration of basic black & white 35mm photography; camera use, film processing and making enlargements; the development of technical and aesthetic skills and elements of design and composition. Emphasis is placed on the historical development of photography and its use as a means of communication and personal expression as well as and on the critical evaluation of student work. Graded or Pass/No Pass option.

PHOT A120H 3 Units (36 lecture hours; 72 lab hours)**Introduction to Photography Honors****Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU; UC.

Introduction to the processes, principles, and tools of photography. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in photography. Discussion and demonstration of basic black & white 35mm photography. Instructions in the theory and technique of camera use, processing film, and making enlargements. Emphasis on the historical development of photography and its use as a means of communication, personal expression and on the critical evaluation of student work. Graded or Pass/No Pass option. Lecture/Lab/Arranged Lab.

PHOT A122 3 Units (36 lecture hours; 72 lab hours)**Personal Expression****Prerequisite(s):** PHOT A120 or PHOT A120H or PHOT A123 or PHOT A125.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Through making photographs, this class explores the development of ideas, and an individual point of view. Discussion of aesthetics and current trends in photography. Students may work with analog or digital media. Fulfills "100" level elective course requirement for Photography Certificate of Achievement. Graded or Pass/No Pass option. Lecture/Lab/Arranged Lab.

PHOT A123 3 Units (36 lecture hours; 72 lab hours)**Introduction to Digital Photography****Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU; UC: Credit Limitation: PHOT A110 and PHOT A123 combined: maximum credit, 1 course.

Instruction in photography as a creative art, emphasizing photography as a means of communication and personal expression. Includes examination of the theory of aesthetics, composition, content, and technical elements of photography, as well as, critical evaluation of student work. Introduces DSLR camera operation and digital imaging techniques. This course is required for the Photography Certificates. Graded or Pass/No Pass option.

PHOT A125 3 Units (36 lecture hours; 72 lab hours)**Imaging for Photographers I****Prerequisite(s):** PHOT A123.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Graded or Pass/No Pass option. Designed to introduce the student to photographic image processing with computers. Lectures and demonstrations of basic image manipulation, current professional digital workflows, color managed digital printing and archiving of images. Two hours lecture, four hours laboratory. Graded or Pass/No Pass option.

PHOT A127 2 Units (18 lecture hours; 54 lab hours)**Darkroom For Photography Majors****Prerequisite(s):** PHOT A110 or PHOT A120 or PHOT A120H or PHOT A123.**Grading Mode:** Standard Letter**Transfer Credit:** CSU.

An introduction to 35mm and medium format techniques. Topics will include; Beginning to intermediate film handling, developing, printing methods and working applications of film-based equipment. This class gives the student an opportunity to explore their creative vision with the use of film-based photography equipment.

PHOT A128 2 Units (18 lecture hours; 54 lab hours)**Medium and Large Format Film Capture****Prerequisite(s):** PHOT A120 or PHOT A120H or PHOT A127.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

An introduction to intermediate medium format and large format camera techniques. Topics will include; Camera movements, medium format and large format film handling, developing, printing methods, and working applications of medium and large format film based equipment. This class gives the student an opportunity to explore their creative vision with the use of film-based photography equipment. Graded or Pass/No Pass option.

PHOT A130 3 Units (54 lecture hours)**History and Appreciation of Photography****Grading Mode:** Standard Letter**Transfer Credit:** CSU; UC.

Provides an overview of the history of photography from 1800 to the present. The work of major practitioners is discussed, as well as lesser known figures, and the trends, movements, and artist groups that have shaped the course of the medium.

PHOT A141 1-2 Units (54-108 lab hours)**Black & White Photography Lab 1****Prerequisite(s):** PHOT A120 or PHOT A120H or PHOT A127.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Instruction and assistance with intermediate black & white laboratory, using 35mm, RC Papers, and camera projects. Students determine their own projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Counts towards 100 level elective course requirement for Photography Certificate of Achievement. Graded or Pass/No Pass option. Lab/Arranged Lab.

PHOT A142 1-2 Units (54-108 lab hours)**Traditional Black & White Photo Lab 2****Prerequisite(s):** PHOT A141.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Instruction and Assistance with intermediate/advanced black & white laboratory using 120 film, fiber based paper, and camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Students determine their own projects. Instruction is offered at intermediate and advanced levels. Counts toward "100" level elective course requirement for photography majors. Graded or Pass/No Pass option. Lab/Arranged Lab.

PHOT A143 1-2 Units (54-108 lab hours)**Traditional Black & White Photo Lab 3****Prerequisite(s):** PHOT A142.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Instruction and assistance with advanced black & white laboratory, using 4x5 film, fiber based paper, a variety of different film/paper developer combinations, and camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Students determine their own projects. Instruction is offered at advanced levels. Counts toward "100" level elective course requirement for photography majors. Graded or Pass/No Pass option. Three to six hours laboratory. Lab/Arranged Lab.

PHOT A152 2 Units (36 lecture hours)**Photo Gallery****Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Aids students in the appreciation and critical analysis of contemporary art photography. Presentations and discussions provide background for weekly field-trips to museums and galleries in the Los Angeles area. Course content differs each semester due to the local exhibition calendar. Counts towards "100" level optional course requirement for Photography Certificate of Achievement. Graded or Pass/No Pass option.

PHOT A161 1-2 Units (54-108 lab hours)**Digital Photography Laboratory 1****Prerequisite(s):** PHOT A123 or PHOT A125 or PHOT A180.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Instruction and assistance with intermediate Adobe Lightroom Classic and workflow to Adobe Photoshop. Refining skills of image adjustment, masking tools, HDR and preparing files for print from camera projects. Students determine their own projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Graded or Pass/No Pass option. Lab/Arranged Lab.

PHOT A162 1-2 Units (54-108 lab hours)**Digital Photography Laboratory 2****Prerequisite(s):** PHOT A125 or concurrent enrollment or PHOT A180 or concurrent enrollment or PHOT A161.**Grading Mode:** Standard Letter, Pass/No Pass**Transfer Credit:** CSU.

Instruction and assistance with digital workflow involving Raw files, Adobe Photoshop and other professional software, including color grading, compositing, layer masks, adjustment layers and preparing files for printing from camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Students determine their own projects. Instruction is offered at intermediate levels. Graded or Pass/No Pass option.

PHOT A180 **4 Units (54 lecture hours; 72 lab hours)**
Introduction to Professional Photography
Prerequisite(s): PHOT A123.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Instruction in the basic professional techniques and the use of professional cameras and lighting stressing technical excellence in all phases. Three hours lecture, two hours laboratory, two hours arranged.

PHOT A187 **3 Units (36 lecture hours; 72 lab hours)**
Laboratory Practices
Prerequisite(s): PHOT A120 or PHOT A120H.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Study of professional black and white photographic techniques. Emphasis on the following areas; film, developer and paper selection and testing, exposure, contrast control (zone system), advanced fine printing techniques, alterations of photographic materials through intensification and reduction, basic sensitometry and practical photochemistry. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A188 **5 Units (81 lecture hours; 27 lab hours)**
Commercial Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Overview of the profession of photography. Study and application of the techniques of commercial photography with emphasis on LED, strobe and available lighting; small and large products, advertising illustration, special effects image techniques, and basic business practices.

PHOT A196 **3 Units (36 lecture hours; 72 lab hours)**
Photo Bookworks
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

Major course projects are the production of several unique photographic books. Layout, typography, editing of photos, and makeup of a book are covered. Attention will be paid to viewing and discussing a wide range of photographic bookworks. Instruction is offered at intermediate and advanced levels. Recommended for photography majors. Graded or Pass/No Pass option. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A200 **3 Units (36 lecture hours; 72 lab hours)**
Documentary Photography
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Concepts, aesthetics and history of documentary photography. Strongly recommended for students interested in journalism, material culture and social/political issues. Students may use B&W, color or digital photography. Instruction is offered at intermediate and advanced levels. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A220 **3 Units (36 lecture hours; 72 lab hours)**
Fashion Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Prepares the student for employment in professional fashion photography. Topics include studio lighting techniques, studio practices, posing of models, garment and set styling, as well as, skin retouching techniques. Lecture/Lab/Arranged Lab.

PHOT A223 **3 Units (36 lecture hours; 72 lab hours)**
Action Sports Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course designed to address topics and skills associated with photographing in the professional Action Sports industry, for the purpose of illustrating a concept or an idea as it relates to publishing, advertising, web and social media.

PHOT A225 **3 Units (36 lecture hours; 72 lab hours)**
Professional Digital Workflow and Color Management
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Emphasis on current techniques of advanced digital printing workflow, digital file preparation, color management and advanced digital retouching techniques. Recommended for those with an interest in commercial, editorial, or fine art work. Counts toward "200" level elective for Photography Certificate of Achievement. Two hours lecture, three hours laboratory, one hour arranged.

PHOT A230 **3 Units (54 lecture hours)**
Photography Since 1945
Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU; UC.

A critical history of photography from 1945 to the present. Works will be considered from social, political, and art historical perspectives. Will survey the work of major photographers, exhibitions, and critical writers, as well as the ever-increasing role of photography in contemporary cultural life. Graded or Pass/No Pass option.

PHOT A241 Business Practices for Photographers Prerequisite(s): PHOT A180. Grading Mode: Standard Letter, Pass/No Pass Transfer Credit: CSU.	3 Units (54 lecture hours)	PHOT A264 Exhibition Preparation 1 Prerequisite(s): PHOT A120 or PHOT A120H or PHOT A123. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)
<p>Presentation of basic business practices in commercial photography including pricing, marketing, and calculating expenses. Helps students to identify and achieve professional photographic objectives. Graded or Pass/No Pass option.</p>		<p>Faculty directed study into the conception, development, planning and installation of photographic exhibitions. Students work closely with faculty in the running of the photography department's three gallery spaces. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>	
PHOT A260 Art Portfolio Development 1 Prerequisite(s): PHOT A180. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)	PHOT A265 Exhibition Preparation 2 Prerequisite(s): PHOT A264. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)
<p>Faculty directed study into the history, criticism, interpretation, literature, theory, or business of art photography, not involving any lab work. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>		<p>Faculty directed study into the conception, development, planning, and installation of a personal photographic exhibition. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>	
PHOT A261 Art Portfolio Development 2 Prerequisite(s): PHOT A260. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)	PHOT A266 Marketing and Self Promotion 1 Prerequisite(s): PHOT A180. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)
<p>Faculty directed in-depth study of a specific area of art photography. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>		<p>Faculty directed in-depth study of a specific area of photographic marketing and self-promotion. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>	
PHOT A262 Commercial Portfolio Development 1 Prerequisite(s): PHOT A180. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)	PHOT A267 Marketing and Self Promotion 2 Prerequisite(s): PHOT A266. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)
<p>Faculty directed in-depth study of a specific area of professional commercial portfolio development. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>		<p>Faculty directed, in depth study of the implementation and application of a created marketing and self-promotion plan. Topic(s) and faculty chosen by the student and will include, but not be limited to, branding and identity, logo design, websites, and Internet marketing. Instruction is offered at advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>	
PHOT A263 Commercial Portfolio Development 2 Prerequisite(s): PHOT A262. Grading Mode: Standard Letter Transfer Credit: CSU.	1 Unit (54 lab hours)		
<p>Faculty directed in-depth study of the preparation of a professional commercial portfolio and portfolio presentation. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Counts toward '200' level elective course requirement. Lab/Arranged Lab.</p>			

PHOT A280 **3 Units (36 lecture hours; 72 lab hours; 0 other hours)**
Professional Digital Techniques
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course on professional digital techniques for emerging digital photographers. A strong technical basis will be introduced, but primary orientation will be toward solving practical problems in professional digital photography. Areas covered will include advanced post-production practices, simulating professional working situations, and professional digital methodologies. Lecture/Lab/Arranged Lab.

PHOT A282 **3 Units (36 lecture hours; 72 lab hours)**
Professional Portraiture
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Prepares the student for employment in professional portrait photography or management of a portrait photography studio. Topics include studio lighting techniques, studio practices, the variety of specialized services offered by professional portrait photographers, as well as, skin retouching techniques. Lecture/Lab/Arranged Lab.

PHOT A283 **4 Units (54 lecture hours; 72 lab hours)**
Art Photography
Prerequisite(s): PHOT A125.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A critique based studio class focusing on photography as a contemporary art medium – concepts, aesthetics and history of art photography in relation to contemporary art practice in general. Students may use black and white, color or digital photography. Instruction is offered at intermediate and advanced levels. Required for photography majors. Three hours lecture, two hours laboratory, two hours arranged.

PHOT A285 **3 Units (36 lecture hours; 72 lab hours)**
Wedding and Event Photography
Prerequisite(s): PHOT A180.

Advisory: PHOT A188 and PHOT A225.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course in professional wedding and event photography techniques, methodology and workflow. This course is designed to prepare the student for the professional industry by introducing a high technical level.

PHOT A287 **3 Units (36 lecture hours; 72 lab hours)**
Alternative Methods
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter, Pass/No Pass
Transfer Credit: CSU.

An intermediate to advanced course covering modern photographic techniques involved with alternative photographic processes. Graded or Pass/No Pass option. Technical and creative experimentation will be emphasized. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A288 **3 Units (36 lecture hours; 72 lab hours)**
Editorial and Advertising People Photography
Prerequisite(s): PHOT A188.

Grading Mode: Standard Letter
Transfer Credit: CSU.

Addresses the topics and skills associated with commercial photography of people, usually on location, for the purpose of conveying a message, idea, or concept in advertising, editorial, and annual report applications. Topics include commercial and retail portraiture, concepts communicated through portraiture, location scouting and lighting. Two hours lecture, two hours laboratory, two hours arranged.

PHOT A289 **3 Units (36 lecture hours; 72 lab hours)**
Architectural Photography
Prerequisite(s): PHOT A180.

Grading Mode: Standard Letter
Transfer Credit: CSU.

A course in professional architectural photography techniques, methodology and workflow. This course is designed to prepare the student for the professional industry by introducing a high technical level. Exterior and interior architectural photography are covered with an emphasis on different light sources, perspective and color correction. Some fieldwork with instructor. Lecture/Lab/Arranged Lab.

PHOT A290 **3 Units (36 lecture hours; 72 lab hours)**
Advertising Illustration Photography
Prerequisite(s): PHOT A188.

Grading Mode: Standard Letter
Transfer Credit: CSU.

This course is designed for the advanced photography student and professional photographers with specific interest in the commercial photography field of advertising illustration. Counts toward "200" level elective course requirement for Photography Certificate of Achievement. Lecture/Lab/Arranged Lab.