

PRINTING TECHNOLOGY

Division: Technology and Engineering

Division Dean

Ken Starkman

Faculty

Benjamin Cuatt

- Advanced Sheetfed Offset Presswork Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/advanced-sheetfed-offset-presswork-certificate/>)
- Digital/In-Plant Graphics Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/digital-in-plant-graphics-certificate/>)
- Electronic Imaging Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/electronic-imaging-certificate/>)
- Flexography Skills Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/flexography-skills-certificate/>)
- Printing Technology (General) Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/printing-technology-general-certificate/>)
- Printing Technology Associate in Science Degree (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/printing-technology-associate-science-degree/>)
- Screen Printing Certificate (<https://catalog.nocccd.edu/fullerton-college/degrees-certificates/printing-technology/screen-printing-certificate/>)

PRNT 030 F Introductory Printing Skills Lab 0.5-6 Units

Prerequisite(s): PRNT 101 F with a grade of C or better.
27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)

PRNT 031 F Offset Skills Lab 0.5-6 Units

27-324 hours lab per term. This course provides students with the opportunity to practice offset lithographic printing skills through further usage of printing equipment. Use of small and large offset presses, electronic pre-press and computer-to-plate systems can be practiced. (Degree Credit)

PRNT 032 F Flexographic Printing Skills Lab (formerly PRNT 090 F) 0.5-6 Units

Advisory: Completion of or current enrollment in a flexographic or introduction to printing course.

27-324 hours lab per term. This course provides students with the opportunity to practice flexographic printing skills through further usage of Esko Automation Engine software, CTP (Computer to Plate) hardware and software, plate mounting and flexographic printing equipment. (Degree Credit)

PRNT 033 F Digital Printing Skills Lab 0.5-6 Units

Prerequisite(s): PRNT 060 F or PRNT 075 F, with a grade of C or better
27-324 hours lab per term. This course provides students with the opportunity to practice offset digital printing skills through further usage of printing equipment. (Degree Credit)

PRNT 034 F Prepress Skills Lab 0.5-6 Units

Prerequisite(s): PRNT 075 F with a grade of C or better
27-324 hours lab per term. This course provides students with the opportunity to practice prepress skills through further usage of prepress equipment. (Degree Credit)

PRNT 035 F Screen Printing Skills Lab 0.5-6 Units

Advisory: Ability to safely operate silk screen printing equipment.
27-324 hours lab per term. This advanced course will provide students with an opportunity to practice silk screen printing skills that have developed from completing other printing courses. (Degree Credit)

PRNT 044 F Self-Publishing Techniques for Sequential Art 3 Units

This course introduces students to publishing techniques for sequential art including comics, graphic novels, and children's books. Students learn to produce their work both with the professional equipment, as well as how to successfully publish with limited printing capabilities.

PRNT 050 F Screen Printing I (formerly PRNT 072AF) 2 Units

18 hours lecture and 54 hours lab per term. This is a basic course which introduces the principle, basic methods and techniques of preparing designs and placing stencils on a screen printing frame. Topics include establish register systems and printing on various substrates as per industrial procedures, care, use and safety precautions in operating and cleaning of the screen printing frames, equipment and supplies. (Degree Credit)

PRNT 051 F Screen Printing II (formerly PRNT 072BF) 2 Units

Prerequisite(s): PRNT 050 F with a grade of C or better.
18 hours lecture and 54 hours lab per term. This is an intermediate course which covers vocational copy preparation techniques or multi-color reproduction, register and color matching. Instruction includes ink composition, modifiers and proper ink for production. Emphasis is on new inks and curing procedures (Degree Credit)

PRNT 052 F Screen Printing III (formerly PRNT 072CF) 2 Units

Prerequisite(s): PRNT 051 F with a grade of C or better
18 hours lecture and 54 hours lab per term. This course prepares students to print multi-color projects with tight register printing on various substrates. Topics also include heat transfer and gray scale printing. (Degree Credit)

PRNT 060 F Basic Digital Printing (formerly PRNT 070 F) 2 Units

18 hours lecture and 54 hours lab per term. This course introduces students to the field of digital imaging using desktop publishing software and digital presses, as well as finishing equipment. This course includes instruction in page layout and design using various computer applications including InDesign, Illustrator, and Photoshop. Computerized pre-press instruction includes preflighting of files and imposition. This course also includes instruction on the operation of digital RIP systems and bindery, preparing the student for more advanced digital imaging classes, as well as occupational skills necessary in in-plant graphics and printing today. (Degree Credit)

PRNT 061 F Intermediate Digital Imaging (formerly PRNT 070 F) 2 Units**Prerequisite(s):** PRNT 060 F with a grade of C or better

18 hours lecture and 54 hours lab per term. This is an intermediate course which covers the technical aspects of digital image layout and digital presswork and intermediate design theory. This course is designed for those entering the printing field and are interested in training for digital press operation. Course content includes the application of knowledge and performance of pressroom safety, digital marking systems, electronic prepress, graphic layout for print application, press maintenance techniques, and an exposure to intermediate production techniques. (Degree Credit)

PRNT 062 F Advanced Digital Imaging (formerly PRNT 070 F) 2 Units**Prerequisite(s):** PRNT 061 F with a grade of C or better

18 hours lecture and 54 hours lab per term. This advanced course covers the technical aspects of digital image layout, digital presswork and advanced design theory. This course is designed for those entering the printing field and are interested in training for digital press operation. Course content includes the application of knowledge and performance of pressroom safety, digital marketing systems, electronic prepress, graphic layout for print application, press maintenance techniques, and an exposure to advanced production techniques. (Degree Credit)

PRNT 075 F Electronic Prepress I 6 Units**Advisory:** PRNT 101 F

72 hours lecture and 144 hours lab per term. This course has pre-flighting, export of files, imposition, file formats, and computer-to-plate imaging for sheet fed offset presswork. This course presents the theory of color and how it applies to the lithographic process and digital imaging. Typesetting, proof reading and image manipulation via digital files, to merge copy and graphics, is an integral part of this course. Design and creativity is not the intent of this course. Curriculum includes the Printing Industries of America Prepress Skills Training Program. Software applications including Adobe Creative Suites (Acrobat, InDesign, Bridge, Photoshop and Illustrator), Rampage RIP, Preps imposition, XMPie variable data, and Suitcase Fusion will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress). (Degree Credit)

PRNT 077 F Advanced Electronic Prepress 6 Units**Advisory:** PRNT 075 F

72 hours lecture and 144 hours lab per term. This course presents the advanced theory of color management and how it applies to the lithographic process and digital imaging. This course has instruction in electronic page layout, preflighting, exporting of files, imposition, file formats, and plate imaging for sheetfed offset press. Curriculum includes the Printing Industries of America Prepress Skills Training Program Tasks 4, 5, and 6. Software application including Adobe Creative Suites (Acrobat, InDesign, Photoshop, and Illustrator), Rampage RIP, Preps imposition, Fiery Color Profiler Suite, and XMPie variable data will be used. (Fullerton College certification in Electronic Prepress, Printing Industries of America certification in Electronic Prepress.) (Degree Credit)

PRNT 085 F Introduction to Flexography 4 Units

54 hours lecture and 54 hours lab per term. This introductory course will provide the student with a technical understanding of flexographic press operation for one, two and three color printing. Students will practice the set-up, operation, and clean-up of a narrow web flexographic press. Topics for discussion will include history of flexography, flexographic plates, plate mounting, ink systems and nomenclature, types of cylinders, substrates, die cutting, stripping, slitting, environmental concerns, and related safety. (Degree Credit)

PRNT 086 F Advanced Flexography 4 Units**Advisory:** PRNT 085 F

54 hours lecture and 54 hours lab per term. This advanced course will provide the student with advanced technical aspects of flexographic press operation for multiple color printing. Students will practice pre-press techniques and develop advanced flexographic press skills on a narrow web label press. Advanced applications of flexographic processes, design, multi-color prints, plate materials, bar codes, inks, substrates, presses and press equipment, pressroom practices, environmental concerns, and related safety will be discussed. (Degree Credit)

PRNT 090 F Printing Skills Lab 0.5-6 Units**Advisory:** Any printing technology class except screen printing classes.

Open Entry/Open Exit 27-324 hours lab per term. This advanced course will provide students with an opportunity to practice various printing skills that have developed from completing other printing courses. Students can improve skills in the operation of digital printing equipment, electronic pre-press, large offset press operation, small offset press operation, flexographic press operation, bindery operations, paper specifications, and machine maintenance. (Degree Credit)

PRNT 091 F Advanced Topics in Printing 0.5-6 Units

27-324 hours lab per term. This course will provide the student the opportunity to study new and emerging skills and field of studies in the printing industry. This course will be offered in modules for advanced topics. Unit credit may range from .5-3 units per module. Consult class schedule to verify specific topic area and credit offered in a particular module. (Degree Credit)

PRNT 101 F Introduction to Printing 3 Units

36 hours lecture and 72 hours lab per term. This is a basic course which covers the technical aspects of the various printing processes and related areas. This course includes instruction in page layout and design using various computer applications including InDesign, Illustrator and Photoshop. Computerized pre-press instruction includes preflighting of files and output on computer-to-plate systems. This course also includes basic instruction in small offset press, flexography, screen printing, digital printing and prepares the student to enter other more advanced printing classes. (CSU) (Degree Credit)

PRNT 133 F Packaging Production 3 Units**Advisory:** Working knowledge of Illustration software

36 hours lecture and 72 hours lab per term. This course introduces students to the process and technical aspects of designing and creating custom packaging. This course includes instruction in packaging layout and design using various computer applications including InDesign, Illustrator, and Photoshop, as well as in computer-aided drafting software such as Esko's Artios CAD. Course also includes instruction in large format printing and prototype die cutting on a plotting table. (CSU) (Degree Credit)

PRNT 140 F Color Management 3 Units**Advisory:** PRNT 101 F

36 hours lecture and 72 hours lab per term. This course explores Color Management using G7 Process Control to standardize workflow processes and achieve consistent color reproduction, reduce costs and expand efficiencies in a print environment. This course addresses the challenges of managing color across devices and workflows, defining how to integrate and maintain proven industry practices and standards. This course is workflow training from the creative process through final print output. (CSU) (Degree Credit)

PRNT 142 F Prepress for Print using Adobe Creative Suite 3 Units**Advisory:** PRNT 101 F.

36 hours lecture and 72 hours lab per term. This course is prepress workflow training using Adobe InDesign, Illustrator, Photoshop and Acrobat. Students learn proper file creation and the preflight of client-supplied files through final print output. This course teaches the basics of font management, color spaces, image correction, resolution, discovery of errors through preflight, file repair, proofing, and final output. Design is not the intent of this course. (CSU) (Degree Credit)

PRNT 145 F Variable Data Imaging 3 Units**Advisory:** PRNT 075 F and PRNT 101 F

36 hours lecture and 72 hours lab per term. This course provides students with exposure to the concepts of variable data printing using XMPie software. Students will explore one-to-one marketing concepts, cross media platforms and how variable data effects these markets. (CSU) (Degree Credit)

PRNT 152 F Introduction to Electronic Prepress 4 Units**Advisory:** PRNT 101 F

54 hours lecture and 54 hours lab per term. This course covers the technical aspects of electronic prepress. The use of both Macs and PC based computers, using current software in page layout, scanning, design, typography, file management for printers will be taught. This class is part of the new industrial image skills training program. (CSU) (Degree Credit)

PRNT 171 F Offset Presswork 6 Units**Advisory:** PRNT 101 F or one year industrial experience or two semesters of articulated high school graphics.

72 hours lecture and 126 hours lab per term. This is a basic course which introduces the technical aspects of lithographic sheet-fed offset presswork for those seeking initial employment in the printing industry. The basic lithographic theory and its application to knowledge and performance of pressroom safety, the feeder, register, pre-production and an exposure to production techniques. (PIA Certification) (CSU) (Degree Credit)

PRNT 172 F Intermediate Offset Presswork 6 Units**Prerequisite(s):** PRNT 171 F with a grade of C or better.

72 hours lecture and 126 hours lab per term. This intermediate course covers the technical aspects of lithographic, sheeted offset presswork and intermediate lithographic theory. This course is designed for those entering the printing field and are interested in training for large press operation. Course content includes the application to knowledge and performance of pressroom safety, the cylinder system, inking and dampening systems, press make-ready procedures, multicolor printing, press maintenance techniques, and an exposure to intermediate production techniques. Emphasis is on completion of the knowledge certificate by passing the GATF/PIA-SC, Fullerton College examination. This is the completion of the Sheeted Offset Press Certification initiated in the PRNT 171 F prerequisite. (Graphic Arts Technical Foundation - GATF -Certification) (CSU) (Degree Credit)

PRNT 973 F Advanced Offset Presswork 6 Units**Prerequisite(s):** PRNT 172 F with a grade of C or better.

72 hours lecture and 126 hours lab per term. This is an advanced course designed for students entering the printing field seeking employment. This printing production course covers the intricate reproduction of process lithographic color. The advanced application of press performance, pressroom safety, press feeder systems, the printing units, the inking and dampening systems, four color register, make-ready and advanced production techniques. Emphasis is on completion of the Performance Certificate by passing the GATF/PIA-SC, Fullerton College four color process practical examination and gaining employment. (PIA Certification) (CSU) (Degree Credit)