

GRAPHIC COMMUNICATION

<http://www.grc.calpoly.edu/>

The Graphic Communication Department offers a Bachelor of Science degree that blends creativity, technology, and strategy. This interdisciplinary program prepares students to effectively design and produce communication across physical and digital platforms for a wide range of industries. Students gain a unique combination of creative, technical, and business skills that prepare them for success in the rapidly evolving fields of graphic communication.

The Graphic Communication Department occupies approximately 33,000 square feet of specialized laboratory space, including industrial specialty software for print and packaging design and production, as well as a wide range of software for digital media development. The department also features specialized equipment for print and packaging prototyping and production. Fourteen hands-on laboratories support project-based instruction in areas such as design and production, print and packaging, management, UX/UI design (User Experience/User Interface), and immersive technologies.

The Graphic Communication Department receives support from an active advisory board comprised of industry leaders representing major graphic communication companies and industry organizations, ensuring the program remains aligned with real-world demands and evolving technology.

Undergraduate Programs

- Graphic Communication (BS) (<https://catalog.calpoly.edu/liberal-arts/graphic-communication/graphic-communication-bs/>)

Undergraduate Minors

- Graphic Communication Minor (<https://catalog.calpoly.edu/liberal-arts/graphic-communication/graphic-communication-minor/>)

GRC Courses

GRC 1000 Introduction to Graphic Communication (3 units)

Term Typically Offered: F

Introduction to Graphic Communication curricula and resources including advising, student success, and culture. Laboratory safety practices. Graphic Communication history, theory, industry segments, applications, and practices. Communication and design technologies including printing, graphics for packaging, and Internet applications. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GRC 101.

GRC 1020 Introduction to Digital Applications (3 units)

Term Typically Offered: F, SP

Prerequisite: Graphic Communication major, Graphic Communication minor, or Liberal Arts and Engineering major.

Fundamentals of professional digital applications for graphics creation and production across various channels. Techniques for effective experiential design. 2 lectures, 1 laboratory. Formerly GRC 201.

GRC 1030 Graphic Communication Management, Manufacturing, and Strategy (3 units)

Term Typically Offered: F, SP

Prerequisite: Graphic Communication major.

Survey of management fundamentals and components relevant to graphic communication manufacturing, production, operations, quality, and strategy. Introduction to management, strategic management theory, and contemporary management trends in the graphic communication industry. Course may be offered in classroom-based or online format. 3 lectures. Formerly GRC 204.

GRC 1040 Materials for Graphic Communication Applications (3 units)

Term Typically Offered: F, SP

Prerequisite: Graphic Communication major, Liberal Arts and Engineering major, or Graphic Communication minor.

Technical aspects of paper, other substrates, inks, toners, and other printable materials used in the printing and packaging industries. Manufacture, application, and interaction of these materials in relation to particular processes and end use requirements. Hands-on testing of materials in relation to quality, properties, and performance. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 211.

GRC 1090 Web Development and Design Principles (3 units)

Term Typically Offered: F, SP

Prerequisite: Graphic Communication major.

Web development production techniques for web publishing with a strong emphasis on accessibility. Web development strategies for desktop, tablet, and mobile devices. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Replaced GRC 338.

GRC 1100 Visual Literacy and Communication (3 units)

Term Typically Offered: F, SP

2026-28 or later catalog: GE Area 3A

2020-26 catalogs: GE Area C1

Critical evaluation of visual media to determine effective communication strategies. Deconstruction of visual grammar to analyze context, content, composition, aesthetics, and technical affordances. Emphasis on human perception and visual rhetoric of signs, symbols, and conventions to create and convey meaning. Course may be offered in classroom-based or hybrid format. 3 lectures. Fulfills GE Area 3A (GE Area C1 for students on the 2022-26 catalog).

GRC 2000 Applied Graphic Communication Practices (1 unit)

Term Typically Offered: F, SP

Prerequisite: GRC 201 or GRC 1020 for Graphic Communication major; or GRC 101 or GRC 1000 for Graphic Communication minor.

Practical experiences through University Graphic Systems (UGS) in production of commercial, publication, specialty products, digital media, marketing, sales, project management, business operation, and other related applications in the graphic communication industry. Repeatable up to 6 units. 1 seminar. Replaces GRC 372.

GRC 2020 Digital File Preparation and Workflow (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 101 or GRC 1000; GRC 201 or GRC 1020; and Graphic Communication major.

Terminology and techniques used in the creation of digital files and workflow systems for print and web. Workflow options including automation, proofing, and output systems will be discussed in addition to digital file delivery and transfer. Course offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 203.

GRC 2040 Print and Production Technology (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 211 or GRC 1040 and Graphic Communication major; or GRC 201 or GRC 1020 and Graphic Communication minor.

Digital, offset, and flexographic reproduction methods, including reproduction principles, markets, workflow, and quality control as they relate to the profession. Finishing and binding methods in digital, offset, and flexographic printing. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Replaced GRC 328.

GRC 2050 Digital Typography (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 101 or GRC 1000; GRC 201 or GRC 1020; and Graphic Communication major, Graphic Communication minor, or Liberal Arts and Engineering Studies major.

Application of typography using current software tools for print and digital publishing. In-depth study of communication principles and visual organization using current software for the creative publishing industries. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Replaced GRC 318.

GRC 2070 Consumer Packaging (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 101 or GRC 1000; and Graphic Communication major or Graphic Communication minor.

Package manufacturing, function, accessibility, visual appeal, sustainability, and economics. Strategies for package printing that integrate concepts from diversity, equity, and inclusion (DEI) in marketing, branding, design, and technology. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Replaced GRC 337.

GRC 2200 Special Problems for Undergraduates (1-2 units)

Term Typically Offered: TBD

Prerequisite: Graphic Communication major and consent of instructor.

Individual investigation, research, studies, or surveys of selected problems. Repeatable up to 2 units. Formerly GRC 200.

GRC 2270 Special Topics (1-3 units)

Term Typically Offered: TBD

Prerequisite: Graphic Communication major and consent of instructor.

Directed group study of special topics. The Class Schedule will list topic selected. Repeatable up to 6 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 3 lectures. Formerly GRC 270.

GRC 3000 Experience Design (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 328 or GRC 2040; and Graphic Communication major.

Experience design principles and techniques applied to digital products, print and packaging products, and services across multiple mediums. Human-computer interaction, interactive design, tangible interaction, performance data analytics, and social implications. Considerations from psychological and cultural user experience theories and practices. Portfolio building. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 316.

GRC 3020 Digital Photography and Motion Graphics (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 203 or GRC 2020; and Graphic Communication major.

Digital photography and motion graphics for digital printing, interactive media, and web. Lighting, exposure, composition, retouching, digital image processing, and color correction. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 301.

GRC 3030 Marketing and Sales Management for Graphic Communication (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 101 or GRC 1000; GRC 204 or GRC 1030; and Graphic Communication major.

Identification and development of target markets for products and services in the graphic communication industry. Deployment of strategies in pricing, promotion and distribution management. Application of customer relationship management techniques for personal selling, forecasting and planning. 3 lectures. Formerly GRC 361.

GRC 3035 Operations and Project Management for Graphic Communication (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 204 or GRC 1030; STAT 217, STAT 218, or STAT 1110; and Graphic Communication major.

Theory and application of operations and project management principles and quality control methodologies for graphic communication products. Organization strategic and financial analysis, decision-making, equipment and inventory planning, resource optimization, contemporary quality control practices and applications for improving profitability in the graphic communication industry. Course may be offered in classroom-based, online, or hybrid format. 3 lectures.

GRC 3060 Data-Driven Graphics (3 units)

Term Typically Offered: F, SP

Prerequisite: Junior standing; GRC 328 or GRC 2040; and Graphic Communication major.

Study of data sources, organizing, cleaning, and data-relationships. Creation of data-driven graphics used in variable-date publishing (VDP), infographics, and personalized graphics for digital marketing. Study of digital media advertising. Analytics and digital media metrics for revenue analysis. Course may be offered in classroom-based or online format. 2 lectures, 1 laboratory.

GRC 3080 Product Development for Cross-Device Interaction (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 316 or GRC 3000; and Graphic Communication major.

Human-centered design and sustainability principles for product development of cross-device interaction and interusability. Printed/hybrid electronics, physical and digital interfaces for sensory marketing, smart, and interactive packaging. Strategic design, 2D/3D physical/digital prototyping, and fabrication/production. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory.

GRC 3100 Introduction to Applied Social Media in Graphic Communication (1 unit)

Term Typically Offered: F, SP

Prerequisite: GRC 1100 and Graphic Communication major; or GRC 101 or GRC 1000 and Graphic Communication minor.

Practical application of social media tools used in the Graphic Communication industry. Students prepare social media marketing campaigns that require research, design, writing, and elementary analytics. 1 lecture. Replaced GRC 220.

GRC 3200 Color Management (3 units)

Term Typically Offered: F, SP

2026-28 or later: Upper-Div GE Area 2/5

2020-26 catalogs: Upper-Div GE Area B

Prerequisite: Junior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2022-26 catalog); and completion of GE Area 2 with a grade of C- or better (GE Area B4 for the 2022-26 catalog). Recommended: PHYS 1121 or PHYS 1123.

Physics, psychology, measurement, analysis, and management of color for physical and digital outputs, including prints, apps, websites, still and motion graphics, videos, and AR/VR. Practical applications of ensuring the best possible color representation across different media. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 activity. Fulfills GE Areas Upper-Division 2 or Upper-Division 5 (GE Area Upper-Division B for students on the 2022-26 catalog).

GRC 3270 Packaging Graphics Technology and Design (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 318 or GRC 2050; GRC 337 or GRC 2070; and Graphic Communication major.

Advanced creative problem-solving strategies associated with the technologies used in designing graphics for packaging and output methods. Advanced techniques in graphic software including file hygiene, color management, and printing methods. Integrated packaging campaigns which include multiple substrates and digital shelf. Professional portfolio produced. Field trip may be required. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 347.

GRC 3280 Specialty Graphics and Printing (3 units)

Term Typically Offered: F, SP

Prerequisite: GRC 318 or GRC 2050; and Graphic Communication major.

Specialty graphics, printing technology, and materials. Applications in textile and garment decoration, grand and wide format printing, structural and architectural graphics, industrial printing, 3D printing, security printing, embellishment. State-of-art technology for imaging on non-traditional substrates and sustainable solutions. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 357.

GRC 3376 Print and Digital Media Publishing (3 units)

Term Typically Offered: TBD

Prerequisite: Junior standing.

Overview of the design, creation, and publication of print and digital media products. The technologies of digital images, typography, color, graphics, layout, and design for print and digital media, including the Web are studied and applied utilizing industry standard software applications and decision-making methods. Not open to Graphic Communication majors. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 376.

GRC 3990 Front-end Web Development (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 338 or GRC 1090; and Graphic Communication major.

Introduction to JavaScript for web development. Write scripts and mini apps to make websites more interactive and automate functions that enhance user experience within a website. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 340.

GRC 4060 Human Resource Management for Graphic Communication (3 units)

Term Typically Offered: F, SP

Prerequisite: Senior standing; GRC 404 or GRC 3060; and Graphic Communication major.

Human resource management integrated into the success of graphic communication companies. A comprehensive management approach is utilized emphasizing employee development, training, promotion, and motivation. Conflict management, facilitation skills, team building empowerment, leadership, ethical and legal issues in the graphic communication industry. 3 lectures. Formerly GRC 422.

GRC 4290 User Experience Research Methods (3 units)

Term Typically Offered: TBD

GWR

Prerequisite: Junior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2020-26 catalogs); and Graphic Communication major or Graphic Communication minor.

Fundamental User Experience (UX) research practices associated with human-centered design's (HCD) evaluative methods to conduct a pilot UX test and create a UX research report. Human-computer interaction, media psychology, user observation, A/B testing, interviews, and heuristic evaluation. 3 lectures. Fulfills GWR.

GRC 4400 Special Problems for Advanced Undergraduates (1-3 units)

Term Typically Offered: TBD

Prerequisite: Junior standing; Graphic Communication major; and consent of instructor.

Individual investigation, research, studies, or surveys of selected problems. Repeatable up to 3 units. Formerly GRC 400.

GRC 4451 Management Topics in Graphic Communication (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 203 or GRC 2020; and Graphic Communication major.

Current trends and practices in select graphic communication management topics. The Class Schedule will list subtitle selected. Repeatable up to 12 units. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GRC 451.

GRC 4452 Emerging Technologies in Graphic Communication (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 203 or GRC 2020; and Graphic Communication major.

Current trends and practices in select graphic communication emerging digital topics. The Class Schedule will list subtitle selected. Repeatable up to 12 units. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GRC 452.

GRC 4453 Design Reproduction Topics in Graphic Communication (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 318 or GRC 2050; and Graphic Communication major.

Current trends and practices in select graphic communication design reproduction topics. The Class Schedule will list subtitle selected. Repeatable up to 12 units. Course may be offered in classroom-based, online, or hybrid format. 3 lectures. Formerly GRC 453.

GRC 4461 Senior Project - Independent Study (1-3 units)

Term Typically Offered: TBD

Prerequisite: Senior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2022-26 catalog); completion of GE Area Upper-Division 3 (GE Area Upper-Division C for the 2022-26 catalog); one of the following: STAT 217, STAT 218, or STAT 1110; Graphic Communication major; and consent of instructor.

Students will engage in collaborative projects in other disciplines without the constraint of a single semester schedule. Formal presentation and report required. Repeatable up to 3 units. Formerly GRC 461.

GRC 4462 Senior Project (3 units)

Term Typically Offered: F, SP

Prerequisite: Senior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2022-26 catalog); completion of GE Area Upper-Division 3 (GE Area Upper-Division C for the 2022-26 catalog); one of the following: STAT 217, STAT 218, or STAT 1110; Graphic Communication major; and consent of instructor.

Selection and completion of a culminating project. Projects typical of problems that graduates must solve in their fields of employment. Project results presented in formal report and presentation. Course may be offered in classroom-based or online format. 3 seminars. Formerly GRC 462.

GRC 4463 Senior Project - Applied Practices (1-2 units)

Term Typically Offered: TBD

Prerequisite: Senior standing; completion of GE Area 1 with grades of C- or better (GE Area A for the 2022-26 catalog); completion of GE Area Upper-Division 3 (GE Area Upper-Division C for the 2022-26 catalog); one of the following: STAT 217, STAT 218, or STAT 1110; Graphic Communication major; and consent of instructor.

Individual or group-based projects in Graphic Communication competitions and/or sponsored projects. Formal presentation and report required. Field trip may be required. Repeatable up to 3 units. 1 to 2 activities. Formerly GRC 463.

GRC 4470 Special Advanced Topics (1-3 units)

Term Typically Offered: TBD

Prerequisite: Graphic Communication major and consent of instructor.

Directed group study of special topics for advanced students. The Class Schedule will list topic selected. Repeatable up to 6 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 3 lectures. Formerly GRC 470.

GRC 4471 Special Advanced Laboratory (1-3 units)

Term Typically Offered: TBD

Prerequisite: Graphic Communication major and consent of instructor.

Directed group laboratory study of special topics for advanced students. The Class Schedule will list topic selected. Repeatable up to 6 units. Course may be offered in classroom-based, online, or hybrid format. 1 to 3 laboratories. Formerly GRC 471.

GRC 4485 Cooperative Education Experience (3 units)

Term Typically Offered: F, SP, SU

CR/NC

Prerequisite: Sophomore standing; Graphic Communication major; and consent of instructor.

Work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Repeatable up to 6 units. Credit/No Credit grading only. Formerly GRC 485.

GRC 4495 Cooperative Education Experience (6 units)

Term Typically Offered: F, SP, SU

CR/NC

Prerequisite: Sophomore standing; Graphic Communication major; and consent of instructor.

Work experience in business, industry, government, and other areas of student career interest. Positions are paid and usually require relocation and registration in course for two consecutive quarters. Formal report and evaluation by work supervisor required. Credit/No Credit grading only. Formerly GRC 495.

GRC 4500 Visual Communication Systems (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 318 or GRC 2050; and Graphic Communication major.

Development of visual communication systems using typography and other elements, with considered relationships between each part and the whole. Continue to develop technical skills for different formats. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 440.

GRC 4550 Book Design Technology (3 units)

Term Typically Offered: TBD

Prerequisite: Senior standing; one of the following: GRC 318, GRC 322, or GRC 2050; and Graphic Communication major.

Advanced creative problem-solving strategies associated with the technologies used in book design and production. Advanced techniques in page layout, design, typography, type specification and image manipulation as they relate to output technology. Content, format, and distribution of print and electronic books. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 439.

GRC 4600 Graphic Communication in Integrated Marketing Communications (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 361 or GRC 3030; and Graphic Communication major or Graphic Communication minor.

Working with clients, participants will organize and demonstrate proficiency in the use of applicable graphic communication design, workflow and data-driven communication software, and digital printing technologies using print and media software. Course may be offered in classroom-based or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 420.

GRC 4700 Advanced Consumer Packaging (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 337 or GRC 2070; and Graphic Communication major.

Business processes associated with designing and selling packaging for consumer brands. 2D/3D software, user experience and accessible design, sustainability, prototyping, marketing, profitability, and sales for global consumer product goods industry. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 437.

GRC 4800 Immersive Computer Graphics Studio (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 301 or GRC 3020; and Graphic Communication major.

Human centered design and production for immersive user experiences and current tools to create 2D/3D animations and AR/VR/MR applications. Storyboarding, interaction design, UHD and HDR image processing, The Academy Color Encoding System, telepresence, virtual production, and spatial computing. Course may be offered in classroom-based, online, or hybrid format. 2 lectures, 1 laboratory. Formerly GRC 339.

GRC 4900 User Interface Innovations (3 units)

Term Typically Offered: TBD

Prerequisite: GRC 316 or GRC 3000; and Graphic Communication major.

User experience design for innovative graphic user interface design, considering legal, ethical, and business issues to create a design proposal. Design proposals, industry standards, mobile computing, augmented and virtual reality, vehicle infotainment system, and interactive system analysis. 2 lectures, 1 laboratory. Formerly GRC 429.