

## DIGITAL DESIGN (DDSN)

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### **DDSN 1100 Digital Design Foundation (3 Credit Hours)**

This studio course involves inquiry into the nature of the graphic design, game art & animation, and interactive fields. Topics introduced in this course are color theory for print and the screen, file types, design terminology, project workflow, aesthetics, visual concepts, typography and Adobe software fundamentals. The course also introduces students to oral and written communication for design practices, presentation techniques and the client-designer relationship. Lectures, readings, class demonstrations, group exercises and writing assignments are used. Prerequisites: None.

### **DDSN 1101 Digital Imaging (3 Credit Hours)**

This studio course explores raster image-making in the digital platform while creating historical and practical connections between technology and creative problem solving. Topics introduced in this course are the Adobe Photoshop and Lightroom interfaces, photo manipulation, historical perspectives in digital imaging, digital painting, digital darkroom techniques and preparation of digital images for various media. Additionally, students engage in written and verbal communication for ideation and presentation. Lectures, readings, class demonstrations, group exercises and writing assignments are used. Prerequisites: DDSN 1100.

**Prerequisite(s):** DDSN 1100 or 1100.

### **DDSN 1102 Digital Illustration (3 Credit Hours)**

This studio course explores illustration in the digital platform while creating historical and practical connections between technology and creative problem solving. Topics introduced in this course are the Adobe Illustrator interface, illustration tools and techniques, color, photo-realism, historical perspectives in digital illustration and challenges within the digital interface. Additionally, students engage in written and verbal communication for ideation and presentation. Lectures, readings, class demonstrations, group exercises and writing assignments are used. Prerequisites: DDSN 1100.

**Prerequisite(s):** DDSN 1100 or 1100.

### **DDSN 1400 Typography Studio I (3 Credit Hours)**

This studio course examines typography from historical and practical perspectives while creating connections between type as a communication tool and type as visual expression. Topics introduced in this course are the history of type, type anatomy, classifications, terminology, type setting for the screen versus print, rules of typography, hierarchy and formalism. Additionally, students engage in written and verbal communication for ideation and presentation. Lectures, readings, class demonstrations, group exercises and writing assignments are used. Prerequisites: DDSN 1100, 1101, 1102.

**Prerequisite(s):** (DDSN 1100 or 1100) and (DDSN 1101 or 1101) and (DDSN 1102 or 1102).

### **DDSN 1401 History of Graphic Design (3 Credit Hours)**

This studio course examines the history of graphic design from 15,000 B.C. through the invention of writing to present day composition and strictly follows Meggs' History of Graphic Design. Students will explore various movements in graphic design history and create design works that reflect these periods. Parallels between fine art history will be drawn. Students are expected to produce written projects in this course displaying content knowledge. Prerequisites: DDSN 1100, 1101, 1102.

**Prerequisite(s):** (DDSN 1100 or 1100) and (DDSN 1101 or 1101) and (DDSN 1102 or 1102).

### **DDSN 1500 Digital Art Studio I - 2D Imag (3 Credit Hours)**

This studio course uses digital imaging software, Adobe Photoshop, to create masterfully rendered works with manipulation and realism in mind. Students will apply Photoshop knowledge to advanced imaging and rendering techniques and create digital painting and photo manipulation compositions. Prerequisites: DDSN 1100.

**Prerequisite(s):** DDSN 1100 or 1100.

### **DDSN 1501 Digital Anatomy Game Art & Ani (3 Credit Hours)**

This studio course explores traditional fine art drawing paired with digital drawing techniques. Students will apply understanding of anatomy to character development for games and animation. Students will analyze landscape proportions, surface features of human figure and digital anatomic features for image making. Students will then apply digital Zbrush techniques to achieve rendering outcomes. Prerequisites: DDSN 1100, 1500.

**Prerequisite(s):** DDSN 1100 and 1500.

### **DDSN 1502 Digital Art Studio II-Concept (3 Credit Hours)**

This studio course explores design intentions and execution for masterful concept art. Students will create designs for production, silhouette establishing shots, rapid idea generation, iconic characters and environments. Students will create professional written and verbal presentations for portfolio-ready printed works. Prerequisites: DDSN 1100, 1500, 1501.

**Prerequisite(s):** DDSN 1100, 1500 and 1501.

**DDSN 1503 3D Virtual Sculpting (3 Credit Hours)**

This studio course explores virtual sculpting software and techniques to create three-dimensional organic models. Students will understand and apply virtual sculpting techniques in the Zbrush interface using organic models. Prerequisites: DDSN 1100, 1500, 1501, 1502.

**Prerequisite(s):** DDSN 1100, 1500, 1501 and 1502.

**DDSN 1504 Modeling Studio I-Envir Model (3 Credit Hours)**

This studio course uses the Maya interface to master three-dimensional model techniques for hard surface and architecture using UV and texture maps. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503.

**DDSN 1505 Animation Studio I-Intro to An (3 Credit Hours)**

This studio course introduces animation techniques, methods and software. Students will evaluate animation methods and software and create basic animation movements and loops. Students are expected to understand and apply basic levels of rigging and weighting, basic skeleton and walk cycles. Prerequisites: DDSN 1100, 1500, 1501, 1502.

**Prerequisite(s):** (DDSN 1100 or 1100) and (DDSN 1500 or 1500) and (DDSN 1501 or 1501) and (DDSN 1502 or 1502).

**DDSN 2100 Intro to UX Design (3 Credit Hours)**

This studio course explores the field of user-experience design, empathy, user-engagement and best practices. Students will explore and evaluate case studies, create concept-driven strategies to meet the needs of mock-clients and produce wireframes and prototypes. Prerequisites: DDSN 1100, 1101, 1102.

**Prerequisite(s):** (DDSN 1100 or 1100) and (DDSN 1101 or 1101) and (DDSN 1102 or 1102).

**DDSN 2101 Foundation Interactive Design (3 Credit Hours)**

This studio course investigates the practice of interactive design from both front and back-end perspectives. User-experience and user-interface design techniques are employed to develop online interactive content. Topics introduced in this course are image and type for the web, HTML basics, development, testing and updating of effective interfaces, visual, navigational and structural approaches to CSS, visual hierarchy, basic animation for online content, image and file preparation and historical perspectives in interactive design. Additionally, students engage in written and verbal communication for ideation and presentation. Lectures, readings, class demonstrations, group exercises and writing assignments are used. Prerequisites: DDSN 1100, 1101, 1102, 2100.

**Prerequisite(s):** (DDSN 1100 or 1100) and (DDSN 1101 or 1101) and (DDSN 1102 or 1102) and (DDSN 2100 or 2100).

**DDSN 2102 Digital Photography (3 Credit Hours)**

This studio course will explore the history of digital photography in the context of digital design and put into practice photographic compositions and image editing. The digital camera will be used to create compelling visual compositions based on a concept, explore product photography, green screen photography and lighting scenarios. Practice and experimentation with digital image manipulation and compositional techniques is also included in this course. Prerequisites: DDSN 1100, 1101, 1102.

**DDSN 2400 Digital Page Layout (3 Credit Hours)**

This studio course utilizes multi-page layout software to explore long-format design challenges. Topics introduced in this course include advanced InDesign software techniques, design for publication, and file preparation for long-format printing. Students will create concept-driven works for mock clients. Printing and production techniques for long-format design will be employed. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401.

**DDSN 2401 Design Studio I (3 Credit Hours)**

This studio course explores development of printed branding materials within the Adobe interface. Students will create concept-driven projects exploring execution via various media to communicate an event, promotion or series. Students will work with mock clients to create professional written and verbal presentations for portfolio-ready printed works. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400.

**DDSN 2500 Modeling Studio II Character (3 Credit Hours)**

This studio course applies advanced character modeling techniques for advanced sculpting and UV and texture maps. Students will identify advanced sculpting techniques and proper topology flow for real time characters. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505.

**DDSN 2501 Animation Studio II (3 Credit Hours)**

This studio course examines rigging and weighting of characters within the animation interface. Scripting language is introduced. Students are expected to apply animation techniques to construct complex character rigs and techniques for advanced rigging solutions, skeleton, skinning associations with geometry. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505.

**DDSN 2502 Digital Art Studio III Modular (3 Credit Hours)**

This studio course explores to use of modular components to allow for efficient reuse in the game design environment. Students will understand how to create these assets with a focus on modularity. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505.

**DDSN 2503 Animation Studio III (3 Credit Hours)**

This studio course explores advanced animation techniques as well as motion capture technology. Students will understand and apply motion capture system and integrate motion capture within traditional animation principles. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502.

**DDSN 2504 Game Engine Studio I (3 Credit Hours)**

This studio course explores the Unreal Engine interface and systems with an introduction of Blueprint scripting language. Students are expected to understand and apply Unreal Engine interface for world building, interface and navigating systems and premade assets. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502.

**DDSN 2505 Game Engine Studio II (3 Credit Hours)**

This studio course examines the Unreal Engine for world-building, lighting and post-processing for a fully rendered scene. Students will create world building, incorporating lighting and post-processing, to assemble environment projects within a world for a fully-rendered scene within a real time environment. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502.

**DDSN 2600 Interactive Design Studio I (3 Credit Hours)**

This studio course explores design for mobile, display, aesthetics, UX, UI and interactive solutions. Students are introduced to the latest authoring and animation tools and learn how to apply their knowledge of the software to create dynamic and responsive interactive experiences. Students will communicate ideas via written and verbal presentation. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, CPST 3400, CPST 3410.

**DDSN 2601 Digital Narrative Studio I (3 Credit Hours)**

This studio course uses story-telling techniques to communicate to an audience from a variety of platforms. Students will engage in techniques for video editing and visual storytelling through lecture and class projects. Digital editing software is introduced as well as production materials. Students will create short narrative stories to solve a problem, entertain diverse audiences, and market ideas. They will explore various formats, including film, TV, and social media, as well as how each channel has evolved and presents unique opportunities for messaging. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, CPST 3400, CPST 3410.

**Prerequisite(s):** DDSN 1100, 1101, 1102, 1401, 2100, 2101, CPST 3400 and 3410.

**DDSN 2602 Motion Design Studio (3 Credit Hours)**

This studio courses explores vocabularies and concepts of motion design while engaging in previsualization, cinematography, culture, critical studies and media theory. Software such as Adobe Muse and Animate are used to communicate ideas and concepts. Students will create concept-driven storyboarding to articulate ideas and use software to bring these ideas to life. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, CPST 3400, CPST 3410, DDSN 2600, 2601.

**Prerequisite(s):** DDSN 1100, 1102, 1401, 2100, 2101, CPST 3400, 3410, DDSN 2600 and 26001.

**DDSN 3100 Sound Design (3 Credit Hours)**

This studio course introduces sound design principles, historical perspectives and case studies. Students are expected to story board and compose sound for characters, video, motion graphics or interactive elements. Students will create professional written and verbal presentations. Prerequisites: DDSN 1100, 1101, 1102.

**DDSN 3400 Design Studio II (3 Credit Hours)**

This studio course explores development of three-dimensional packaging to communicate a brand or persona paired with two-dimensional supporting materials. Students will work alone and in groups to create original works for mock clients and service-learning experiences. Students will create professional written and verbal presentations for portfolio-ready printed works. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401.

**Prerequisite(s):** DDSN 2401.

**DDSN 3401 Letterpress Studio (3 Credit Hours)**

This studio course explores traditional letterpress techniques within a design context. Students will use their original typographic compositions and translate them to the physical letterpress printing method. Students will critique and analyze design solutions via written assignments and verbal class discussions. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401.

**DDSN 3402 Poster Design (3 Credit Hours)**

This studio course explores using the poster as a means for visual communication within various projects. Students will work alone and in groups to find concept-driven solutions to design problems translated into the poster medium. Students will critique and analyze design solutions via written assignments and verbal class discussions. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400.

**DDSN 3403 M. A. D. Studio (3 Credit Hours)**

Marketing and advertising for designers explores the role designers play in the marketing and advertising industries. Students use marketing and advertising to better communicate a brand or persona within various media. Students will work within service-learning projects to articulate a call to action via multiple media platforms both alone and in groups. Students will critique and analyze design solutions via written assignments and verbal class discussions and presentations. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3600.

**DDSN 3500 Digital Art Effects Complex (3 Credit Hours)**

This studio course explores complex textures, particle systems, materials and advanced Blueprint scripting. Students will create connections between effects and systems with physics simulation. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505.

**DDSN 3501 Game Engine Studio III (3 Credit Hours)**

This studio course examines the Unreal Engine for the process of importing, viewing and implementation of VFX that can apply to characters, weapons, environments and beyond. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505, 3500.

**DDSN 3502 Digital Art Studio IV (3 Credit Hours)**

This studio course explores advanced digital art techniques with the user in mind for intuition and usability. As developers, we know that immersion is everything. When you're immersed you lose track of time and become involved in what the game is presenting. A major factor in what makes or breaks immersion is how easy it is for your player to convert an idea into an in-game action – that is, how fluid your game's User Experience (UX) is and how well-designed its User Interface (UI) is. A game hurts itself by providing too little information or too much, requiring too many inputs, confusing the player with unhelpful prompts or making it hard for a new player to interact. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505, 3500.

**DDSN 3503 Workflow Intro Deve Pipelines (3 Credit Hours)**

This studio course explores the use of Scrum and Agile to aid in pipeline and team management for the unique challenges of game development. Students will learn to form successful agile teams that incorporate programmers, producers, artists, testers, and designers—and promote effective collaboration within and beyond those teams, throughout the entire process. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505, 3500, 3502.

**DDSN 3504 Team Game Art i Interactive (3 Credit Hours)**

This studio course uses teamwork to develop pre-production assets for a fully-interactive game concept. Students will develop their concept for the group game art senior project. Students will apply team environment skillset to character focused, VFX focused, environment focus, animator leads and develop pre-production assets for larger senior team project. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505, 3500, 3502.

**DDSN 3600 Social Media Studio (3 Credit Hours)**

This studio course examines the use of social media within the design field. Students will create graphics for various new media and social media landscapes and develop strategy for implementation. Students will recognize and evaluate social media platforms based on user interaction and outcomes, design strategic graphics for social media campaigns, develop ongoing social media and digital strategy for service-learning client and communicate project via professional written and verbal presentation. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, 2600, 2600, 2601, 2602, CPST 3400, CPST 3410.

**DDSN 3601 SEO SEM (3 Credit Hours)**

This studio course explores search engine optimization and search engine marketing for the interactive space. Students will understand and evaluate ways to improve search engine optimization and search engine marketing, work in groups to develop creative strategy to assist a local client in improved search engine optimization and evaluate advanced search engine marketing techniques in written form. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, 2600, 2600, 2601, 2602, CPST 3400, CPST 3410.

**DDSN 3602 Interactive Design Studio II (3 Credit Hours)**

This studio courses uses advanced UX, UI, interactive design techniques and software to communicate a concept to an audience. Students will understand advanced interactive design techniques and apply techniques to class assignments. Students will create content-rich design solutions showcased within an interactive context using working prototypes in mobile-first design. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, 2600, 2600, 2601, 2602, CPST 3400, CPST 3410.

**DDSN 3603 Digital Narrative Studio II (3 Credit Hours)**

This studio course explores video production within a team environment to create concept-driven, strategic solutions for a real-world client. Students will work in teams to create storytelling experiences via video and motion. Students will understand and analyze advanced principles of the digital narrative, study different approaches to genre and style, develop multimodal approach to digital problem solving, create concept-driven solutions to class assignments, work in groups to develop strategy for service-learning client, communicate project via professional written and verbal presentation. They will explore platforms and brand messaging, along with creative means of achieving goals in these channels. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, 2600, 2600, 2601, 2602, 3600, CPST 3400, CPST 3410.

**DDSN 3604 Motion Design Studio II (3 Credit Hours)**

This studio courses uses advanced motion techniques to execute a strategic approach to a real-world problem. Students work in teams to create a robust deck of interactive motion elements for a local client. Students will prepare and formulate strategic approach using motion design, apply good interactive marketing, design, narrative and motion techniques to formulate a solution. Students will present this solution both in written form and verbally in project presentation. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, 2600, 2600, 2601, 2602, 3600, 3601, 2602, 3603, CPST 3400, CPST 3410.

**DDSN 4100 Portfolio & Prof Practices (3 Credit Hours)**

This studio course prepares students for entry into the workforce. Students will create a personal brand and translate that brand into their portfolio, stationery package and other media for marketing purposes. Students will undergo rigorous self-reflection, mock interviews, presentation techniques and portfolio reworking. Students can expect to create written and verbal communication regarding their brand, personal attributes and portfolio works. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2400, 2401, 3400, 3404, 3600, 4400, 4402, 4404, 4405.

**DDSN 4400 Business of Design (3 Credit Hours)**

This studio course provides students with real-world applications of business practices within the graphic design industry, contracts, the law, business planning, strategy and marketing. Students will assemble a strategic approach to estimating and planning, project workflow in a design business environment and create original work for service-learning client. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600.

**DDSN 4401 Design for Good (3 Credit Hours)**

This studio course explores the greater purpose of design as an agent of change. Students will create multiple projects supporting a cause with a specific call to action. 2D, 3D and interactive elements will be employed to create meaningful works based on a concept. Students will work for personal and service-learning clients and communicate projects via professional written and verbal presentation. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600.

**DDSN 4402 Packaging Design (3 Credit Hours)**

This studio course uses good design techniques paired with visual marketing and advertising strategies to apply design to three-dimensional packaging objects. Students will work alone and in groups to create concept-driven solutions to appeal to an audience via packaging media. Students will communicate projects via professional written and verbal presentation. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600.

**DDSN 4403 Corporate Identity (3 Credit Hours)**

This studio course greater explores the field of corporate identity and branding within a design context. Students will work alone and in groups to create concept-driven works for mock clients and service-learning projects. Students will explore logo design, branding, brand standards, brand strategy and brand application as part of this course. Students will communicate projects via professional written and verbal presentation. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600, 4400.

**DDSN 4404 Environmental Design (3 Credit Hours)**

This studio course greater explores the field of environmental design within a design context. Students will work alone and in groups to create concept-driven works for mock clients and service-learning projects. Students will explore large-scale graphics for a variety of out-of-home media including billboards, transportation design, way finding and accessibility design. Students will communicate projects via professional written and verbal presentation. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600, 4400.

**Prerequisite(s):** DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600 and 4400.

**DDSN 4405 Design Studio III (3 Credit Hours)**

This studio course explores development of multi-media works surrounding project themes. Students will use print (2D), packaging (3D) and interactive media to communicate a project solution. Students will work alone and in groups to create original works for mock clients and service-learning experiences. Students will create professional written and verbal presentations for portfolio-ready printed works. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600, 4400, 4402, 4404.

**DDSN 4406 Designer as Author (3 Credit Hours)**

This accelerated studio course explores development of a project where the student is the author of the concept, product, persona, client, research, execution and implementation from start to finish. This course is reserved for students with a 3.5 or higher GPA who can demonstrate exceptional design skills in two-dimensional, three-dimensional and interactive design techniques. Students interested in taking this course should apply the semester prior via portfolio and written proposal for the course topic. Prerequisites: DDSN 1100, 1101, 1102, 1400, 1401, 2100, 2400, 2401, 3400, 3403, 3600, 4400, 4402, 4404.

**DDSN 4500 Portfolio Studio (3 Credit Hours)**

This studio course pairs students with expert faculty to further develop their portfolio for successful job placement upon graduation. This course may be taken twice for credit. Students will gain greater in-depth portfolio ready works, critique and evaluate works within dossier for improvement and apply greater focus to area of expertise. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505, 3500, 3502, 3503, 3504.

**DDSN 4501 Capstone Game Art Studio (3 Credit Hours)**

This Capstone course further develops the team game art project. The teams will develop, debug and polish their interactive game and present the final work to a panel. All aspects and developmental processes of the game must be showcased in the presentation. Prerequisites: DDSN 1100, 1500, 1501, 1502, 1503, 1504, 1505, 2500, 2501, 2502, 2503, 2504, 2505, 3500, 3502, 3503, 3504.

**DDSN 4600 Multi-Media Studio (3 Credit Hours)**

This studio course encourages the use of multiple media to communicate to an audience. Students will use narrative, social media, motion, website design and other interactive applications per their strategy to create a multimodal user-experience. Students will present ideas both in written and verbal form. Prerequisites: DDSN 1100, 1101, 1102, 1401, 2100, 2101, 2600, 2600, 2601, 2602, 3600, 3601, 2602, 3603, CPST 3400, CPST 3410.

**DDSN 4900 Special Topics (3 Credit Hours)**

Special Topics in Digital Design.

**DDSN 4910 Independent Study (1-3 Credit Hours)**

This course explores special topics with the Digital Design filed. The student will work one-on-one with the faculty member to create portfolio ready works in a concept-driven environment. The independent study may be taken twice for credit if the topics vary.

**DDSN 5050 Digital Design Practicum (3 Credit Hours)**

This course assists in the student's internship experience by providing weekly direction and feedback. The student is responsible for securing an internship during the practicum course period and completing at least 100 total hours during the semester. In addition to the contact hours, each student must maintain a PDF portfolio of works created during the semester for review during the final exam period. Both the student and employer will be given entrance and exit surveys regarding their experiences.