

REFLIP TYPE

DEVELOPING VISUAL STRATEGIES FOR TEACHING TYPOGRAPHY
TO COLLEGIATE STUDENTS WITH DYSLEXIA

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TO COLLEGIATE STUDENTS WITH DYSLEXIA

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DEDICATION

I dedicate this thesis to my family who helped me financially to get to this point as well as emotionally. I also dedicate this to my husband who is always by my side to provide encouragement. Finally, I dedicate this thesis research to my students. They inspire me everyday and make me want to be a better professor. In conducting research to understand teaching typography and design to students with dyslexia, I have become a more well-rounded instructor and truthfully have learned some highly impactful information from the research that I plan to take back to the classroom and use to enhance the overall student learning experience.

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ABSTRACT

In educational facilities today, the approaches to teaching typography to college students with dyslexia are limited. This thesis provides a research-based pedagogy for teaching typography to students in a way that accommodates the visual, processing, and auditory differences present in students with dyslexia. Through the analysis of the learning disability itself, existing material for graphic designers with dyslexia, and current accessibility standards for those with dyslexia, this thesis offers a practical solution to provide a more balanced learning experience for all students, especially those with dyslexia. The aim of this study was to examine the current graphic design standards and refocus and modify them for ease of readability for all individuals, especially those with dyslexia.

CHAPTER 1
INTRODUCTION

INTRODUCTION

Graphic design is "the art and profession of selecting and arranging visual elements—such as typography, images, symbols, and colors—to convey a message to an audience" (Meggs par. 1). Graphic design is also often referred to as "'visual communications,' [emphasizing] its function of giving form [to elements such as book design], advertisement, logo, or Web site" and other necessary information (Meggs par. 1). Graphic design involves learning specific skills and focusing on developing the visual-based solutions to address a given problem. Designers use a combination of text and graphics to develop content accurately in a layout format.

Understanding design means being able to read material accurately in order to address errors or layout text for final concepts. However, if readers have any visual or cognitive impairment, deciphering visual elements, including text, can be very challenging. In the case of this thesis, the focus was dyslexia, which causes readers to struggle with word comprehension and reading because the "person cannot use [their] higher-order linguistic skills to access the meaning [of words or letters] until the printed word has first been decoded and identified"; dyslexia results in a reading deficiency, which "comprises two main processes—decoding and comprehension" (Shaywitz 308).

Dyslexia is a cognitive learning disability that affects an individual's association of letters and words. To define the term, "Dyslexia is a written language disorder characterized by the poor reading of [words and] non-words, and advantage for concrete over abstract words with the production of semantic, visual and morphological errors" (Boumaraf and Macoir 137). Dyslexia affects reading, writing, and visual comprehension capabilities. The comprehension issues stem from a neurological disconnect that results in disrupted communication between the eyes and the brain.

Individuals with dyslexia think differently than those without this learning disability. They may think in a highly creative way with an abundance of creative ideas to express; however, due to the cognitive-based dyslexia

learning disability, these individuals have difficulty effectively using visual elements, such as text, to translate their creative ideas into visual design solutions in the medium of graphic design.

Studies have shown that individuals with dyslexia typically think more with the right hemisphere of their brain than the left. The “left brain hemisphere operates in a linear, sequential manner with logical, analytical and propositional thought” (Vlachos, et al. 1536). People with dyslexia have a more right-brained way of thinking because “the right hemisphere [of the brain] operates in a non-linear, simultaneous fashion and deals with non-verbal information as well as dreams, fantasy, and creative thinking (Vlachos, et al. 1536). The left side of the brain, or left hemisphere, is more focused on spoken language, whereas the “right hemisphere is specialized for visuospatial and appositional thought” (Vlachos, et al. 1536). In other words, people with dyslexia, while right-brained in thought processes, “are highly global, visual, relational, and intuitive learners” (Vlachos, et al. 1536).

In focusing on creative thinking and creativity as a whole, individuals with dyslexia struggle with reading and writing in grade school, so they devise ways to access visual-spatial skills, such as focusing on the development of ideas visually rather than the written format. Majeed, et al. explained, “Despite the typical verbal [or written] impairments, some research has suggested and found that individuals with Dyslexia significantly outperform their peers without Dyslexia on tests of creativity” (188). “If creativity is indeed enhanced in individuals with Dyslexia, one important implication is that encouraging these individuals to build on this strength can potentially improve their self-esteem and overall emotional adjustment (Majeed, et al. 188). Paying greater attention to this unique strength may also help to change public perceptions of dyslexia as largely a disability, thereby reducing the stigma against individuals with dyslexia” (Majeed, et al. 188).

As a college educator teaching students with learning disabilities, I have learned that each student and their learning style is unique. However, finding a uniform approach is key to assisting each student with dyslexia in understanding typography and type arrangement in design. Because my research and

observations revealed that some educators perceive a learning disability as an impediment instead of a neurological deficit, I realized it is crucial to focus on building student inclusiveness in class and self-esteem in students' design capabilities to enhance the overall comprehensive college experience.

Teaching design takes time and patience, especially for instructors of college students with dyslexia. A key factor in teaching typography is to show these students that they can perform at the same level as students without dyslexia. The goal of this thesis was to implement a technique with tracking and leading to provide a new standard in typography education for students with dyslexia. This technique of tracking and leading should be significant enough to enhance students' learning experience but not so excessive that the style itself could not be used in the design industry today. The underlying idea was to provide content that can be accepted in design and at the same time promote a new standard that makes it easier to teach the material and provides a new approach to perceiving typography as design forms rather than just letters for ease of visual comprehension.

Established knowledge about dyslexia indicates that for people with dyslexia, the cognitive and visual correlation is different than for those without dyslexia, but these individuals are still creative people seeking to learn new traits. Dyslexia “is typically associated with speed deficits in reading-related tasks, poor phonological and/or phonemic awareness and poor performance in rapid-naming tasks,” (Majeed, et al. 188) as well as “difficulties with accurate and/or fluent word reading and spelling” (Vlachos, et al. 1537). Even if individuals lack a strong ability in reading and writing accuracy, they can learn to decipher text visually. In other words, students with dyslexia “have a learning style based more on creative, spatial thinking” (Vlachos, et al. 1540). Educators must discover innovative ways to introduce material to students with dyslexia, and focusing on their visual comprehension strengths will be vital to bridging the gap between how these students learn in an environment where not all students have a learning disability. Also, correlating a solution that works for all students will assist in establishing design correlations and allow students to see progressions in typography that make hierarchy, layout, and other key design

methodologies more apparent. All teaching methods should be inclusive, so that students learn in an encouraging environment, and instructors can focus on idea development and content arrangement using Adobe software.

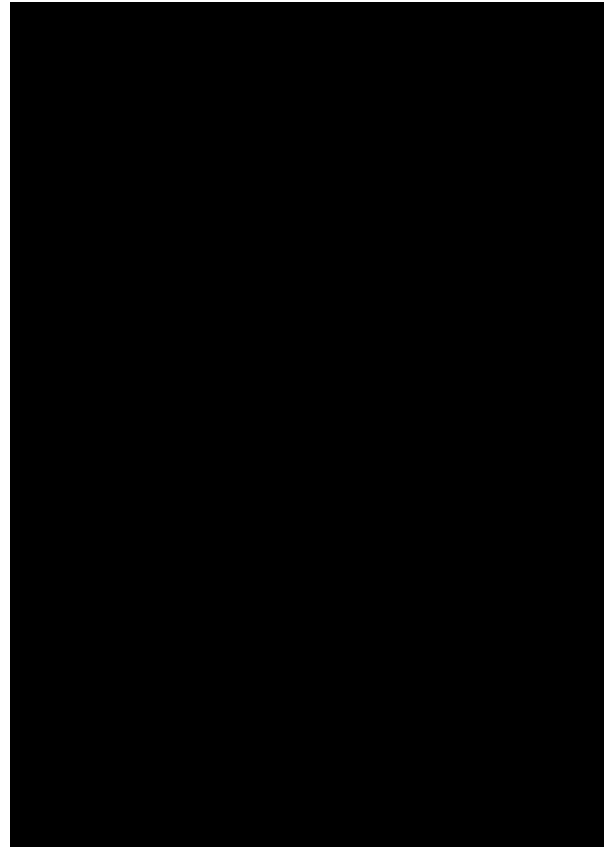
As an instructor and senior graphic designer, it is crucial that I understand all aspects of design to provide the best possible instruction to college students. Through experience and education, I have grown my skill sets to assist students with learning disabilities. My focus on the education of college students with learning disabilities, specifically dyslexia, made me realize that my focus must be not only imparting information but also making students feel that they are part of the big picture, that they are included. It is important to guide education in such a way that understanding is fluid, and inclusivity aids in building confidence. The focus is developing material to break the content down into components or steps that represent progression for understanding. In my experience, it is necessary to break down the complex material into digestible steps to facilitate quick and easy comprehension by students. Through multi-modal instructions, students benefit from visual, auditory, and written representations, techniques which benefit all ranges of students with learning disabilities. This step-by-step approach supports dyslexic students' ability to understand written content, especially when content is augmented with auditory and visual components.

My passion for teaching students with dyslexia goes beyond the learning disability. It is a focus on skills. It is a focus on self-efficacy and self-advocacy for the students. The goal is to promote a safe learning environment where all students feel equal. The learning material does not change in difficulty; instead, my teaching approach changes. The approach focuses on multi-modal learning (auditory, written, and visual). This learning leads to a repetition of material to increase and build upon skills during each class. The passion I have for this type of education derives from the rewards of students' success and feelings of mastery. Inclusive education provides students with all accessibility they need to enhance their learning experiences; these accessibility elements can also be used in life. The students with dyslexia may think and process material differently, but assisting these students in putting their ideas down on paper is a true reward.

CHAPTER 2
RESEARCH

UNDERSTANDING DYSLEXIA

Dyslexia refers to a learning disability that affects an individual's association with letters and words. To define the term, "Dyslexia is a written language disorder characterized by the poor reading of [words and] non-words, and advantage for concrete over abstract words with the production of semantic, visual and morphological errors" (Boumaraf and Macoir 137). Dyslexia affects reading, writing, and visual comprehension capabilities. The comprehension issues stem from a neurological disconnect in communication between the eyes and the brain. To better understand how an individual with dyslexia views letters, see (Figure 1). "The word 'Dyslexia' is derived from the Greek language, with 'dys,' meaning difficulty and 'lexia,' meaning language" (Alsobhi and Alyoubi 26).



The language and writing difficulties present with dyslexia include "phonological processing, rapid naming, working memory, processing speed, and the automatic development of skills that may not match up to an individual's other cognitive abilities" (Alosobhi and Alyoubi 27). Dyslexia is a learning disability that may present itself alongside other metacognitive neurodivergent learning disabilities.

The research will focus on dyslexia and typography, an element of graphic design and visual communication that features words and word structures.

Word association and structure is confusing and uncomfortable for students with dyslexia. The main focus will be on how visual communication can bridge the gap between the challenges associated with dyslexia and typography-based issues while emphasizing educational approaches to enhance learning achievement and prepare the students for a career in design. The research will provide teaching strategies that help students with dyslexia understand typography through visual representation, creating associations with how these students can effectively use images and words to communicate ideas and concepts visually. Providing students with visual representation will also allow them to overcome the reading difficulties that complicate their efforts to design solutions with typography.

Students with dyslexia learn in different ways, but those differences do not mean they should not be given the ability to learn and grow their understanding of graphic design. The goal is not to ostracize these individuals due to their unique cognitive abilities; instead, educators are responsible to help them grow and develop career-based skills. First, providing an inclusive learning environment with constructive feedback will benefit the development of self-confidence. Next, it is essential to provide individuals who have dyslexia with a learning environment in which they can succeed. It has been argued that many obstacles to the inclusion of students with dyslexia can be prevented by adopting a universal design for learning. In other words, instructors can design education to simultaneously accommodate students with diverse learning needs, including students with disabilities and specific learning differences. In this framework, instruction is designed with an orientation towards the diversity among students' needs, reversing the traditional instructional approach in which adjustments for diverse students must be negotiated on an individual basis" (Marco and Mortari 361).

Stampoltzis described how teachers' understanding of dyslexia benefits students:

Teachers' attitudes affect students' attitudes and their learning outcomes. Teachers play the most important role in the assessment of children's symptoms and [behaviors] related to dyslexia. Children with dyslexia usually attend mainstream schools, and teachers are responsible for teaching them effectively and helping them achieve academically and socially. Often the key for a pupil is meeting a teacher who understands what it is like to be dyslexic and who knows the difficulties they experience. When teachers understand the nature and

characteristics of dyslexia, they are better prepared to address students' needs. [Educators'] adequacy is related to their attitudes, but it is more dependent on their knowledge [of] dyslexia (Stampoltzis et al. 129).

Students with dyslexia struggle with visual comprehension of letters and words. When first learning, “[beginner] readers, [or first-grade elementary school children], must decode [printed words] to access the identity of the meaning of words” (Gabrieli 281). At this time, the students “already know the

meanings of words in spoken language, but they have to learn to relate language to print through explicit phonological awareness that spoken words are composed of discrete sounds (phonemes) that can be mapped onto letters or syllables (graphemes)” (Gabrieli 281).

There are many forms of dyslexia, and educators must not focus on only one type. Instead, educators must address the overall composite of symptoms, as dyslexia displays differently in

each person. Types of dyslexia classified by healthcare officials include phonological dyslexia, double deficit dyslexia, surface dyslexia, visual dyslexia, primary dyslexia, secondary [or developmental] dyslexia, and acquired dyslexia (Philipps pars. 6-13). Also, “other learning difficulties [are] associated with dyslexia,” and these include left-right disorder, dysgraphia, dyscalculia, and auditory processing disorder (Philipps par. 14).

In determining the type of dyslexia present in an individual, “the most widely used test in clinical practice,” especially in children, “is the so-called rapid automatized naming (RAN) task that assesses the speed with which” the person can identify a “continuously presented series of highly familiar visual stimuli [displayed] as rapidly as possible” (Bexkens, et al. 213). “The [RAN] stimuli” includes naming elements such as “letters, digits, colors or pictures of familiar objects,” and individuals “with dyslexia typically need more time

“**Educators must address the overall composite of symptoms, as dyslexia displays different in each person.**”

to name the RAN items compared with age-matched controls” of individuals without dyslexia (Bexkens, et al. 213).

Phonological Dyslexia “is an impairment of reading novel words (non-words) with otherwise good performance in reading familiar words” (Tree and Kay 2861). Phonological dyslexia is seen in both “acquired cases ([obtained in life]), or developmental ([obtained in development prior to birth])” (Tree and Kay 2861).

Double Deficit Dyslexia, also referred to as “second core deficit dyslexia, is independent from a phonological deficit” (Vaessen, et al. 202). Dyslexic individuals with double deficits “show more severe literacy problems than dyslexics with a single naming or single phonological deficit because the two problems are independent and additive” (Vaessen, et al. 203).

Surface Dyslexia is a form of dyslexia that “is associated with accurate but slow reading of familiar words, and phonological dyslexia is associated with inaccurate non-word reading and poor phonological awareness” (Hanley and Sotiropoulos 336). Surface dyslexia can also be acknowledged as a form of developmental dyslexia.

Visual Dyslexia “is defined by visual errors in reading” where the individual includes errors that may lead to “substitutions, omissions, and additions of some of the letters in a target word (when at least half of the letters in the error are present in the target word)” (Friedmann, et al. 1).

Primary Dyslexia is “the most common type of dyslexia” and instead of being damage to, it is considered “a dysfunction of the left side of the brain (cerebral cortex) and does not change with age” (Perlstein, “What Are the Six Different Types of Dyslexia?” par. 1). This form of dyslexia can vary in severity, and Perlstein asserted, “Educational intervention will be academically successful throughout their lives” (par. 1).

Secondary or Development Dyslexia “is characterized as a specific, severe and persistent deficit in the acquisition of reading and spelling skills that cannot be explained in terms of other cognitive abilities and educational circumstances” (Bexkens, et al. 212). This form of dyslexia is found in “5-10% of

the general population” and is related to a “deficit in phonological processing,” which inhibits the ability to develop “phoneme-grapheme associations” (Bexkens, et al. 212). Secondary or developmental dyslexia happens due to “problems with the brain development during the early ages of fetal development” (Perlstein "What are the six different types of dyslexia?" par. 2).

Acquired Dyslexia or Trauma Dyslexia is a form of dyslexia that “occurs after [there has been] brain trauma or injury to the area of the brain that controls reading and writing” (Perlstein "What are the six different types of dyslexia?" par. 3).

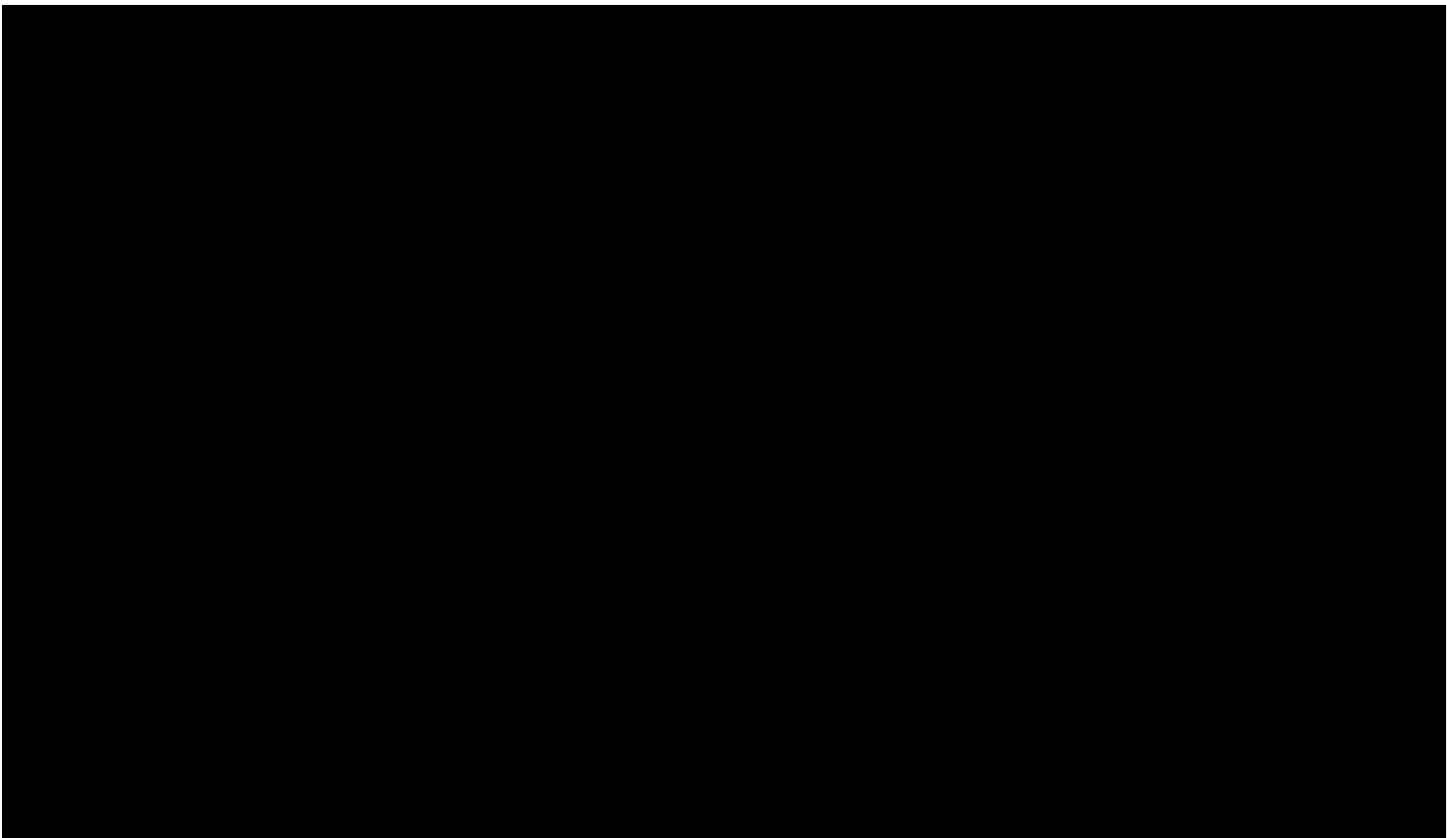
Along with dyslexia, other learning difficulties include left-right disorder, wherein individuals cannot interpret specific visual signals or direction; auditory dyslexia, which inhibits auditory processing of sounds; dysgraphia, which affects the ability to hold a pen and write; and dyscalculia, which affects the ability to work with numbers.

Overall, it is hard to decipher, as “[well-documented findings show] that most [individuals] with dyslexia demonstrate a mixed profile [and can] be differentially impaired with one type of [educational] stimulus” (Peterson, et al. 348). Individuals “with phonological dyslexia are differently impaired at phoneme awareness (PA), whereas [individuals] with surface dyslexia are differently impaired at tasks emphasizing orthographic knowledge” (Peterson, et al. 349).

Understanding the different types of dyslexia clarified the research aim and solidified the final solution approach. The reason for this research was to gain a deeper understanding of dyslexia to understand how to approach teaching typography effectively. Individuals with dyslexia, as a whole, struggle with the visual correlation of letters and words, and they often experience auditory processing difficulties. The goal of teaching creative confidence in typography education is to focus on the visual component. In determining what affected reading and visual interpretation most, the goal was to apply the research information and develop visuals in different formats to provide ease of type letter-to-word correlation. Proper word and letter correlation will allow students with dyslexia to improve their understanding of typographic arrangement and

why it is essential in creating compelling graphic design work. Also, students will learn how to recognize and replicate similar typographic elements in their visual-based project solutions.

In addressing educational approaches to teaching dyslexia, it was crucial to know the different types of dyslexia. The images pictured to the in Figure 2 represent how individuals see with dyslexia. Dyslexia relates to how the eyes perceive the words and the distances between words instead of letters



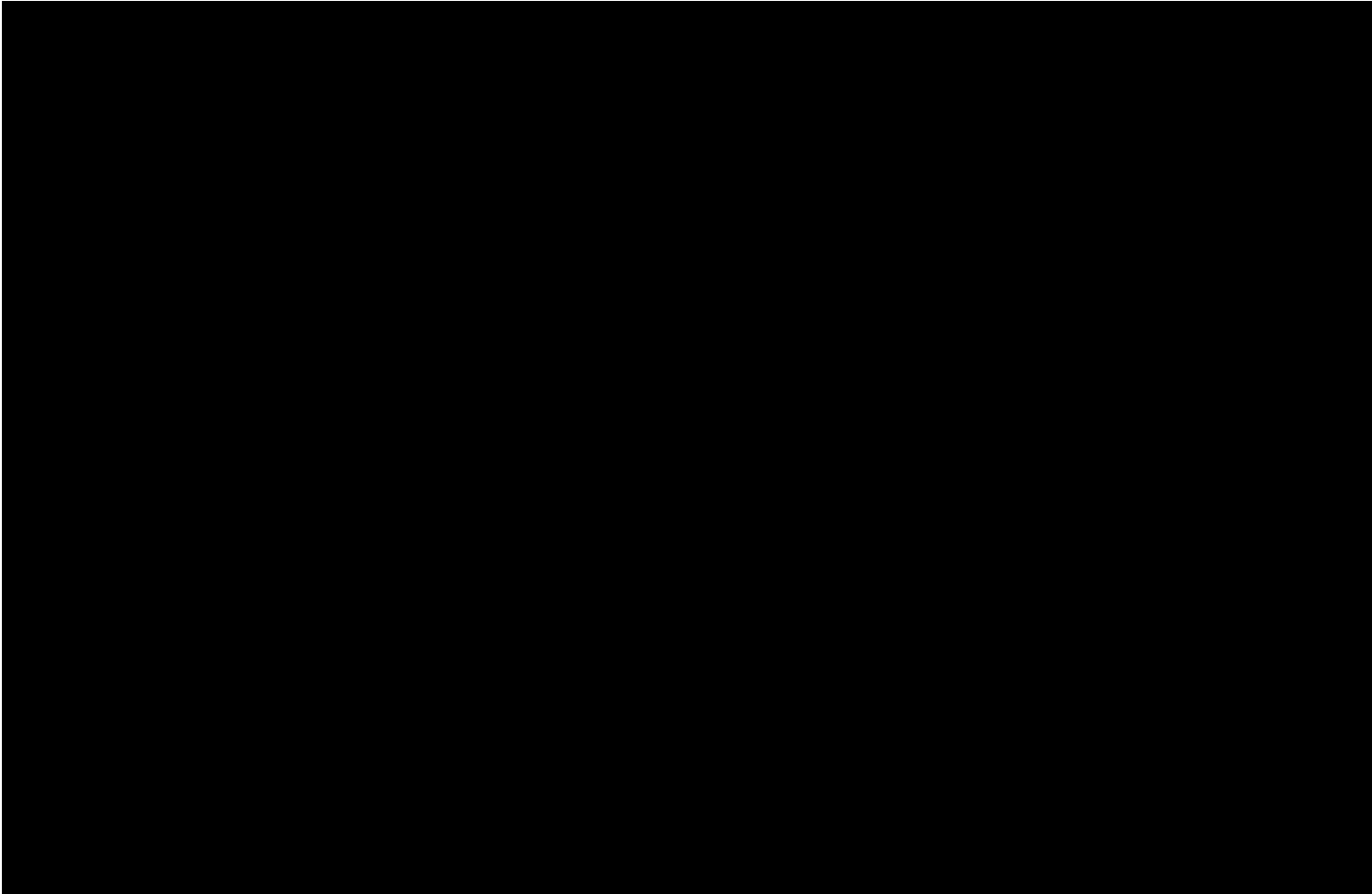
(Figure 2). Readers with dyslexia often skip words, and their eyes do not move in sync to read content fluidly. A reprogramming of the perceptual eye span would have to occur for dyslexic individuals to perceive as a person without dyslexia would, reading while spanning across a series of words. What mainly affects the reading component for people with dyslexia is “the loss of parallelism between the two ocular axes during horizontal saccades [or eye movements], a physiological phenomenon first in divergence then in

convergence at the end of the saccade, occurs differently in dyslexics” (Quercia et al. 873). In other words, this is how the brain to eye connection works for those with dyslexia. Dyslexia affects the connection to the brain, and students with dyslexia especially have “difficulties with accurate and fluent word recognition, poor decoding skills, and spelling difficulties” (Andresen 1151).

As Dyslexic students or individuals read text, “the eyes perform a series of ballistic saccades during which no visual information [processes]” (Quercia et al. 871). Dyslexia can present functionality from high-level processing. For instance, a person may experience a minimal cognitive dysfunction to low-level processing, wherein the individual faces extreme difficulty and disruption between cognitive functionality concerning word understanding and association. It is best to introduce new material to individuals with dyslexia auditorily for comprehension purposes. When introducing visual components first through auditory receptive methods, the pupil can associate the sound with its written form to improve visual comprehension of letterforms, words, and word structures.

Figure 3 demonstrates how difficult it is for individuals with dyslexia to read and perceive written material. Dyslexic students tend to focus their reading strategies on using the “slow and capacity-demanding phonological route [however] this process uses a lot of their cognitive capacity to decode words and can have negative consequences for single as well as multiple source comprehension, especially for the integration of information within and across sources” (Andresen, et al. 1152). Students have been more and more exposed to media, too, as the internet evolved. The introduction to the content and images benefits these students regarding memory retention, versus just reading alone. Therefore, providing a visual and hands-on environment could be critical if students with dyslexia are to overcome typography association issues.

Along with vision and reading, dyslexia also changes visual attention capabilities: “Visual attention reduces the amount of information that can be processed and accelerates the entire vision process” and is categorized into selective and divided attention types (Quercia et al. 874). “‘Selective’ attention concerns the ability to centralize gaze on the relevant information from among



multiple stimuli located in the visual field while ignoring those not relevant to the performance of a task” (Quercia et al. 874). “‘Divided’ attention is defined as ‘the ability to respond to several visual stimuli simultaneously in order to perform two or more visual tasks at the same time’” (Quercia et al. 874). Since dyslexia takes so many forms, understanding focal points and ways to focus the attention is vital. The “attention window” enables educators to address the functionality of an individual with dyslexia and “the amount of orthographic information able to be treated at every step of reading and learning” (Quercia et al. 875).

Gaining an understanding of the components of dyslexia aids in understanding how an individual perceives and retains information. Knowing the different components that make up the learning disability and how it has been addressed in past experiences provides insight into new approaches and suggests ways

to modify how typography can be introduced to students with dyslexia. How students with dyslexia retain information is a crucial component that may become a significant contributor to the design industry, as these students perceive design in a different format than individuals without dyslexia. Students with dyslexia are very visually oriented, as word comprehension is problematic for them. With such a visual perception of the world, students with dyslexia can provide a new generation of visualization, ideation, and vision in design.

Individuals with dyslexia have difficulty with writing and spatial and temporal functions. These difficulties affect functions such as telling time or direction, motor control, reading and reading comprehension, spelling, listening, organization, note-taking, hearing, handwriting, and ideation. Also, noises can provide interference. The diagram in figure 3 provides information on the different types of dyslexia and the different problems that arise with each area. Dyslexia can be addressed, and students can improve in skill. However, it takes the right combination of teaching strategies and methods to provide an educational experience these students can understand and strategies that can promote success.

TYPOGRAPHIC CHOICES & DYSLEXIA

The changing of typefaces leads to more fluency in reading overall. Research indicated that educators of college-based graphic design students with dyslexia must assist the students in understanding typography in the best way possible. In a college setting, especially for students with dyslexia, “teachers and educational researchers have suggested that it is always beneficial to simplify material and its presentation to reduce the cognitive load on the learner” (French, et al., 301). Often “in a school setting, students and teachers sometimes judge the success of a lesson based on the ease of understanding, processing, and remembering the presented information” (French, et al., 301). This approach is not appropriate for those with dyslexia and does not apply to metacognitive variations (French, et al., 301).

Studies have shown that “making information harder to learn can improve future recall” (French, et al. 301). It is important to understand that recall is the ability to remember stored memory; however, when recall is affected, the individual may have difficulty recalling new information without repetition and practice. However, for learners with dyslexia, overly detailed information can result in high anxiety levels, inability to process material, or other circumstances under which the student cannot follow along and does not receive the necessary resources to succeed. According to French et al., “Desirable difficulties are manipulations of the information to be learned that can make it harder for the learner and slow the learning process” (301); however, having dyslexia does not mean the individual will not experience “increased retention of information over time” (French, et al. 301). A stronger approach, which may be achieved through teaching experience, is not to make the material more difficult but to create a repetitive process that provides the same content repeatedly while slowly introducing new concepts. This approach provides a way to educate students in complex material with less of a processing overload. This method could heavily reduce anxiety and makes the content far more understandable and easier to address.

DESIGN OF TEXT

FONTS

Individuals with dyslexia tend to see letterforms and identify words by their shape rather than the individual letters and combination of letterforms that comprise words. Based on research, “font recommendations come from associations for people with dyslexia, and they agree on using sans-serif fonts,” and “the British Dyslexia Association recommends using Arial, Comic Sans, or, as alternatives to these, Verdana, Tahoma, Century Gothic, and Trebuchet” (Rello and Baeza-Yates 15:3). Researchers have not reached a consensus regarding font selection based on evidence-based studies; however, some also “recommended [to avoid using] italics and fancy fonts, which are particularly difficult for a reader with dyslexia, and pointed to Arial as the preferred font choice” (Rello and Baeza-Yates 15:4).

“Individuals with dyslexia tend to see letterforms and identify words by their shape rather than the individual letters and combination of letterforms that comprise words.”

Alongside sans serif typefaces or fonts, “the only recommendation for serif fonts came from the International Dyslexia Centre and that was for Times New Roman,” and “Courier is easier to read by people with dyslexia because it is monospaced” (Rello and Baeza-Yates 15:4). Helvetica and Helvetica Neue, similar to Arial, are also popular choices. Fonts that have been specifically designed for people diagnosed with dyslexia include “Dyslexie, Read Regular, Lexie Readable, and Open Dyslexic” (Rello and Baeza-Yates 15:4). Open

Dyslexic is the free font variation. Font examples that represent both the above references as well as similar font styles that match the same visual appeal.

The following are examples of fonts that include both the above referenced and similar font styles that offer the same visual appeal.

Arial > Arial written as example.

Baskerville > Baskerville written as example.

Helvetica > Helvetica written as example.

Helvetica Neue > Helvetica Neue written as example.

Comic Sans > **Comic Sans** written as example.

Courier > Courier written as example.

Bodoni > Bodoni written as example.

Garamond > Garamond written as example.

Georgia > Georgia written as example.

Myriad > Myriad written as example.

Times > Times written as example.

Times New Roman > Times New Roman written as example.

Tahoma > Tahoma written as example.

Verdana > Verdana written as example.

Calibri > Calibri written as example.

ITC Avant Garde > ITC Avant Garde written as example.

Open Sans > Open Sans written as example.

Open Dyslexic > **Open Dyslexic** written as example.

Traditional and Modert Type Styles

The fonts on the previous page are good options because they are sans serif, monospaced, and roman based on structure. These types of “font styles significantly improved the reading performance over serif, proportional and italic fonts” (Rello and Baeza-Yates 15:1). Open Dyslexic is a free downloadable font that benefits individuals with dyslexia as the font structure keeps the letters from flipping and moving. Also, Open Sans is an excellent alternative for web-based fonts when fonts like Arial or Helvetica may not be available.

Rello and Baeza Yates' research states:

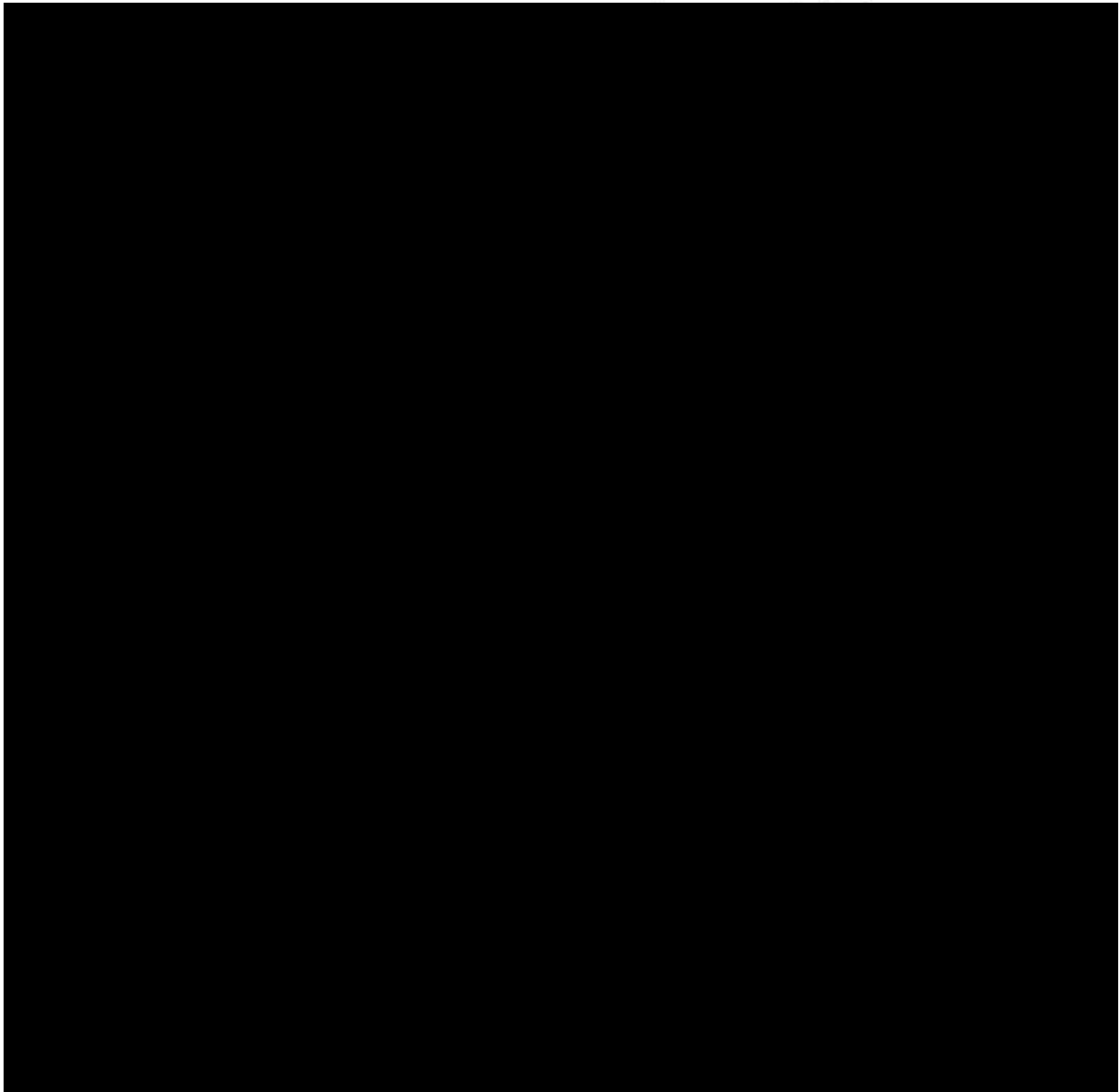
Most of the previous work with regular readers without dyslexia applies to the two most common fonts used on screen and in printed texts, Arial and Times [and] users preferred Georgia as more pleasing and easier to read. In a second test, they compared Georgia with Verdana, a sans serif face designed for onscreen use. Users expressed subjective preference for Verdana, but they performed better reading Georgia. Bernard et al. [2003] compared two fonts—Arial and Times—and two font sizes—10 and 12 points—with 35 participants (Rello and Baeza-Yates 15:4).

Focusing on using Helvetica font variations, Arial, Verdana, ITC Avant Garde, and Computer Modern will be the most beneficial in developing content for design material regarding benefit design-based understanding for students with dyslexia. When focusing on the design of text, there are specific elements that must be addressed.

FONT READABILITY AND LEGIBILITY

When focusing on the design of text, specific elements must be addressed. The only style guide those with dyslexia was developed by the British Dyslexia Association. The goal of this association is to develop a guide that represents the best approaches to developing content for people with dyslexia. However, the downside of this style guide online is that it does not include recommendations for design-specific letter spacing and line spacing; instead,

the guide states that adding more spacing in these elements is ideal. The standard for typography in today's industry is to use 12-point type. In *Thinking with Type: A Critical Guide for Designers, Writers, Editors, and Students*, Lupton stated that "the point system equals 1/72 inch or .35 millimeters. Twelve points equal one pica, the unit commonly used to measure column widths" (38; Figure 5). The readability depends not only on the size of the type but also on the set "width of the letter [which is] intrinsic to the proportions and visual impression of the typeface" (Lupton 38; Figure 4).



The next factors are the size of the type and the line width, which also play a factor in readability: “Readability and legibility are independent but distinct measures of a reader’s interaction and engagement with any type setting” (Strizver ch. 4). Readability is “the measure of how easy or difficult it is for the reader to understand a written text setting; legibility is defined as the measure of how easy or difficulty it is for the reader to distinguish individual letterforms from each other” (Strizver ch. 4). The readability and legibility of type is dependent on “typographic principles of measurement and spacing, namely line length or measure, character count per line, word spacing, leading, and case, which are all critical to the success of a graphic designer’s typeface selection” (Strizver ch. 4).

“**Word spacing is the critical spacial consideration that has a direct influence on readability of any text setting.**”

Designers must consider readers’ comfort, as well. A longer measure, or line length, can “create eye strain, causing the reader to lose their place when reading; shorter line lengths or measures fragment text setting, forcing a reader to become distracted” because the reader must “constantly [return] to a new line of text” (Strizver ch. 4). Even though line lengths vary depending on the application of the text,

“a count of sixty (60) to seventy-two (72) characters (including word spaces) per line” is the most “recommended for optimum readability” (Strizver ch. 4).

An additional component is word spacing. Word spacing can be adjusted with tracking and letter spacing with kerning in design. Word spacing focuses on “a critical spatial consideration that has a direct influence on the readability of any text setting” (Strizver ch. 4). If there is too little word spacing, readers may encounter “difficulty . . . in distinguishing one word from another”; however, if there is too much spacing, then readers perceive “a visual separation between words, creating a disjunctive and disruptive reading experience” (Strizver ch. 4). Along with word spacing, any designer must also consider elements such as the “x-height, cap height, weight, and type style when evaluating a type selection for any [given] application” (Strizver ch. 4).

The most notably legible fonts in the industry today are Old Style, Transitional, and Modern text typefaces, respectively, such as Garamond (Claude Garamond, ca. 1530; see here), Baskerville (John Baskerville, 1757; see here), and Bodoni (Giambattista Bodoni, 1798; see here), all possess universal visual characteristics that enhance legibility—simplicity, proportion, and contrast (Strizver ch. 4).

“While utilizing these typefaces does not automatically guarantee legible text settings, typographic principles such as measurement, spacing, and alignment will certainly influence how these text settings are read” (Strizver ch. 4). These principles, however, do not denote that these are the only options available; these choices represent industry standard regulated fonts focusing on readability and legibility. When focusing on readability and legibility, “form follows function,” and “you need to remember that optimum readability and legibility allow a reader to immediately focus on words first, not on the typeface [selected]” (Strizver ch. 4).

For people with dyslexia, the most readable font styles are sans serif fonts, as stated above in the research. Other researchers have tested variables but provided more results for what individuals with dyslexia cannot do than what they can achieve. Research findings indicated that the “font size should be 12-14 point or equivalent” as larger fonts are more readable to individuals with dyslexia (British Dyslexia Association "Readable fonts" par. 2). Letters should have “larger inter-letter/character spacing (sometimes called tracking) [which] improves readability, ideally around 35% of the average letter width” (British Dyslexia Association "Readable fonts" par. 3). The 35% mark for letter width is stated to be ideal because if the “letter spacing is excessive it can reduce readability,” which is the opposite of the intended goal to increase readability. Also, the “inter-word spacing should be at least 3.5 times the inter-letter spacing” (British Dyslexia Association "Readable fonts" par. 4).

The line spacing itself, also referred to as leading, should be “1.5/150% [which is preferable]” (British Dyslexia Association "Readable fonts" par. 5). When understanding and using the 1.5 measurement, it is best to represent that the spacing is the number multiplied by 1.5.

Another recommendation is to avoid any form of italics or underlining “as this can make the text appear to run together and cause crowding” of letters (British Dyslexia Association par. 6). If emphasis is needed, it is best to use bolding of letters or words. Another rule is to “avoid text in uppercase/capital letters and small caps, which can be less familiar to the reader and harder to read” (British Dyslexia Association par. 7).

FONT HEADINGS AND STYLES

When using headings and styles in writing, consistency is key to ensure the content is easy to follow for the individual with dyslexia. Heading type should be “at least 20% larger” than body copy or “normal text” in a document (British Dyslexia Association "Headings and structure" par. 2). Bolding can be used with headers if more emphasis is needed. Also, designers should make sure there is extra space added with any headings and between each paragraph for ease of navigation on the page and readability. Also, because hyperlinks can easily be seen as headings or important type, make sure to distinguish hyperlinks so they appear different and are easy to find and not easily confused with other type elements.

When working with type, use formatting tools prebuilt into the software, such as “text alignment, justification, indents, lists, line and paragraph spacing to support assistive technology users” (British Dyslexia Association "Headings and structure" par. 3).

FONT & LAYOUT COLORS

When working with type and color, and content in regard to document color formats, there are various rules that should be followed to increase readability for individuals with dyslexia. It is best to “use single color backgrounds [and to] avoid [use of] background patterns or pictures and distracting” elements (British Dyslexia Foundation "Colour" par. 1). Make sure that there are high

levels of contrast between text and backgrounds. The use of “dark colored text on a light (not white) background” is most ideal (British Dyslexia Foundation "Colour" par. 3). White backgrounds are not preferred as “white can appear too dazzling” and be a distraction to letter recognition (British Dyslexia Foundation par. 3). The colors to avoid using are green, red, and pink because “these colors are difficult for those who have color vision deficiencies (color blindness)” (British Dyslexia Foundation "Colour" par. 4). Also, when printing, matte paper represents a stronger readable surface as gloss

FONT LAYOUT

When working with type layout, “left align text, without justification” (British Dyslexia Foundation "Layout" par. 1). When possible, avoid the use of columns, as seen in newspapers. The length of lines of text should not exceed “60 to 70 characters” (British Dyslexia Foundation "Layout" par. 3). White space should be used to reduce “clutter near text and group related content” (British Dyslexia Foundation "Layout" par. 4). Finally, it is good to include a table of contents to enhance navigation of a document that has a lot of written content, like a book.

TYPING WITH FONTS

When typing content for individuals with dyslexia, designers should focus on using an “active rather than passive voice” and “be concise” to “avoid using long, dense paragraphs” (British Dyslexia Foundation "Writing Style" par. 1). Make sure the sentences are concise, and avoid unnecessary words. The “use [of] images to support text” enhances readability and reading comprehension (British Dyslexia Foundation "Writing Style" par. 4). The use of bullet points or numbered lists can also improve readability by breaking up content in a more evenly spaced format than paragraphs. Always “give instructions clearly, avoid double negatives, and avoid abbreviations where possible,” and provide a glossary “if abbreviations or complex words are used (British Dyslexia Foundation "Writing Style" par. 9).

TECHNIQUES FOR TEACHING TYPOGRAPHY

There are several components to focus on when teaching typography to students with dyslexia. These components should relate to multi-modal learning, literacy, and inclusivity.

The first focus should be a structured and comprehensive literacy approach. Students with dyslexia typically have a lower literacy in reading and writing due to a visual misconception of words and letters. Providing an alternative to reading, such as accessibility readers, boosts confidence in the activity of reading. For example, “a small handheld e-reader device, formatted to display a few words per line” allows for the reduction of content viewed at one time in large text-based elements. The same readers who struggle can read the content and “sight words” on the page more easily using a device. Therefore, students learn to recognize and decode phonemes and in turn “read more rapidly” (Schneps et al. 1).

When it comes to improving writing, a focus on practice will boost students’ confidence in writing techniques: “Students with dyslexia often [have writing difficulties, [and this factor] can be partially attributed to their reading difficulties, [which] can manifest in many ways in their writing, such as poor spelling, poor legibility, lack of diverse vocabulary, poor idea development, and/or lack of organization” of content (Hebert et al. 843). Working on improving such writing deficits will lead to improved written skills for those with dyslexia. Students with dyslexia should be developing writing skills even in typography classes as they need to be able to catch errors and read and manipulate text in the design field. The higher the self-efficacy with reading and writing, the better the result for final designs.

Creating an inclusive classroom is another way to reduce the negative stigma of dyslexia: “A lack of confidence can affect their performance, especially in social situations, such as reading and writing in front of others” (Pino and Mortari 347). “Dyslexic students pose a particular challenge to academic staff because their difficulties are hidden” (Pino and Mortari 347). An instructor or professor

may not be aware of the learning disability and therefore may feel as if the student is not participating, when in truth, the symptoms of dyslexia are not outwardly recognizable, and the student may be unable to maintain the same level of coursework as a student without dyslexia. Therefore, pointing out that a student is lazy or not working because they have Dyslexia does not promote their self-esteem overall. Also, teaching at the rate of a non-Dyslexic student will typically confuse the student with Dyslexia and leave them having questions they are fearful of asking. In turn, creating an inclusive learning environment allows everyone to feel equal. It promotes learning and the ability for anyone to ask any type of question. This allows the student with Dyslexia to feel included and provides the student with the needed time to learn, both inside and outside of the classroom. This experience also allows the student to learn self-advocacy and speak up for themselves if material is not understood without scorn or discrimination.

Therefore, a teacher's asserting that a student is lazy or not working when they in fact have dyslexia does not promote their self-esteem overall. Also, teaching methods that are designed for students without dyslexia typically confuse students with dyslexia and leave them with questions they are afraid to ask. In contrast, creating an inclusive learning environment allows everyone to feel equal. Such an environment promotes learning and makes space for anyone to ask any type of question. This approach allows the students with dyslexia to feel included and provides all students with the time they need to learn, both inside and outside of the classroom. This experience also allows the students to learn self-advocacy and speak up for themselves without fear of scorn or discrimination.

In regard to placing typography, the best approaches derive from logical ideas of how the information should be relayed. Focusing on ways to separate the text to have wider tracking and more leading will provide an easier understanding of the text in general. This arrangement allows students with dyslexia to read the

“ The best approaches derive from logical ideas of how the information should be relayed to students. ”

information more easily. Also, presenting different versions, including extra-spaced text and closer-spaced text, allows easier processing and reading for dyslexic students. This approach is effective because the students will first read the letters with higher tracking and kerning, understand the content, and then move on to the lower tracked and leaded text, where they will see the letters in a more visual format and be able to read more easily. This practice promotes reading literacy and design confidence overall.

Also, it is key to incorporate multi-modal learning. Consistently presenting material in a written format, verbal format, and visual format improves the students' overall cognition. Students can perceive the information in different formats, and receiving the information in a multi-modal format will allow the enhancement of self-efficacy, and in turn, the student will learn the material in a more well-rounded format.

“ It is key to incorporate multi-modal learning. Consistently presenting material in a written format, verbal format, and visual format improves the students' overall cognition. ”

DYSLEXIA IN GRAPHIC DESIGN EDUCATION

In working to understand the education of students with dyslexia, it is vital that instructors understand the learning disability. However, it is also essential to have a strong understanding of the material being taught. In gaining a strong understanding of the current teaching techniques available to students with dyslexia, instructors may develop new insights that enhance productivity and retention among graphic design students with dyslexia in college settings.

GRAPHIC DESIGN

GRAPHIC DESIGN DISCIPLINE

Graphic design is a profession and discipline learned through understanding basic design principles to gain real-world experience. Graphic design is more than just preparing “students for professional practice”; design also must be taken seriously as a program of study with “a state of flux” and constant “external engagement” to provide growth and development (Harland 5).

Teaching alone is insufficient to train graphic designers. Providing students with real-world experiences and practice is vital in aiding and engaging on a higher level. Harland focuses on creative engagement as the research states:

Engaging creativity: employing assessment feedback strategies to support confidence and creativity in graphic design practice dampens the student fixation on grades by emphasizing the importance of the teacher-student relationship and value of face-to-face feedback, despite institutional barriers working against this practice. (Harland 5)

The more engaged a student is, the more confident the student will become in making design decisions. In turn, the focus should be on skill and learning, not grades, so students will focus less on how much they can make and more on how they can improve their skills and work ethic.

DESIGN METHODS & COMMUNICATION

Students must correlate theory to practice to engage in the course material. For example, “design students usually are unmotivated to read semiotics theory without a clear relation to practice” (de la Cruz and Mejia 84). In other words, students react more and engage more when they learn theory in correlation with a hands-on activity. Students can better understand course material if they can work on a project or exercise that provides a tangible example of the design’s element, how it is used, and why it is essential. As students learn theory, working with content provides a robust understanding and recall. If the theory were taught alone, students might neither sustain interest nor relate elements as easily.

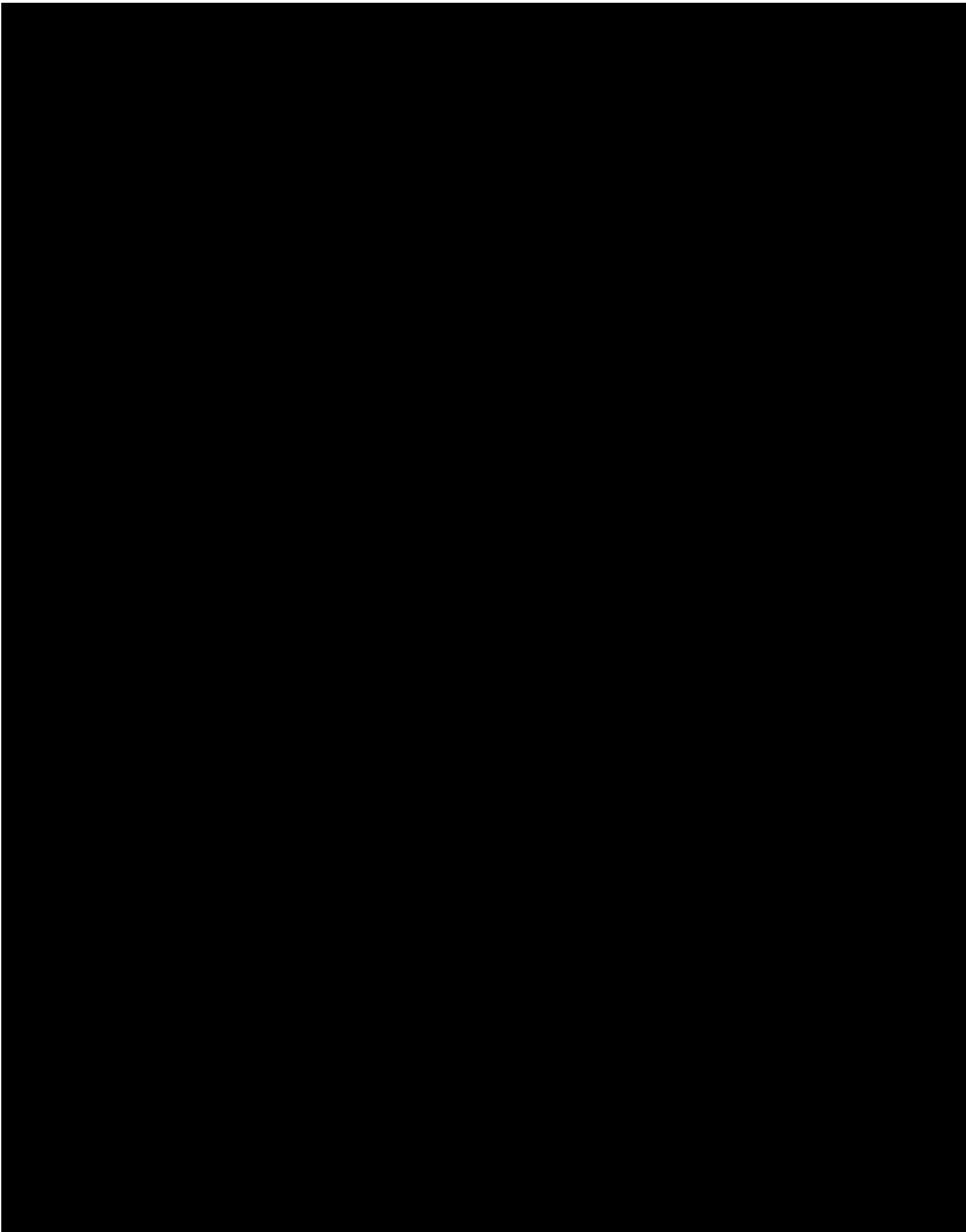
Another crucial element is teaching with graphics. For example, “mood boards offer a visual and censorial channel of communication,” and this visual representation “can take an active role assisting problem finding and also problem-solving in the design process” (Ormecioglu and Ucar 1802). Mood boards are just one of the many ways students who do not work well with large amounts of text can visually relay and document research. Mood boards serve as vital representation pieces for research advancement towards final design pieces.

DESIGN PROCESS

According to Lu et al., “During the design process, it is not possible for someone to be under optimal conditions and have unlimited inspiration at all times” (154). However, for students with dyslexia, who may already have confidence issues, the lack of ability to develop an idea may lead to emotional shutdown. Allowing these students the flexibility to develop a design and research process that suits their learning style will help them discover their own eureka moments. Students must also be aware that research and research development aids in understanding and better development of design work through gaining physical samples or more knowledge of the topic itself. Lu et

al. explained, “As confirmed in numerous studies, designers’ iterative behavior varies between their moves and the images they are seeing,” and the aspects of their process may not be limited to personal experiences (155). Helping students to focus on the “big idea approach [which] relies primarily on image associations” provides its benefits (Lu et al. 156). When numbers and letters are eliminated, students with dyslexia can make associations and correlations with visual images. These visual images can then aid in relationships later with typographic arrangement. Students with dyslexia have varied and different cognitive processes, as represented in Figure 5, which must be addressed individually based on unique neurological considerations.

Students must focus not only on design abilities and technical knowledge but also on creative confidence to evolve and grow through design development and achieve professionalism. Gaining creative confidence does not happen overnight, and if students have low levels of self-confidence, focusing on creative confidence may take more time and effort. Focusing on education in graphic design for students with dyslexia requires an understanding of practice, hands-on experience, and psychology. Increasing creative confidence requires “the willingness to take adaptive risks [and the] risk of making mistakes and even failing” in order to learn and grow (Beghetto et al. 2). Students must understand that taking risks and sometimes not succeeding is a normal and helpful part of the experience of learning. Teaching must involve the ability to develop content and the understanding of how to address design education with real-life values in the classroom.



MULTI-MODAL & NEUROIMAGING

The last area to address is multi-modal neuroimaging for students with dyslexia.

Multi-modal techniques focus on educating students via multiple senses, using visual, auditory, kinesthetic, and reading and writing strategies with every educational approach (Figure 6).

According to Kleven, et al., “Visual learning involves the use of graphs, infographics, cartoons and illustrations, videos, artwork, flow charts and diagrams” to stimulate the eyes and brain of the individual (“Visual Learning” par. 1).

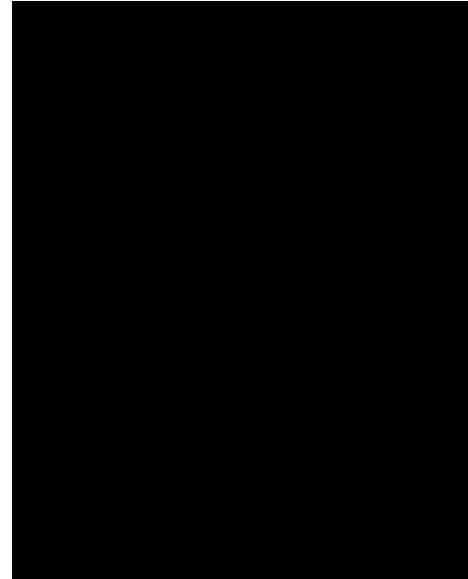
“Auditory learning is mostly concerned with what we listen to” and focuses on lecture or other auditory relay methods (Kleven, et al. “Auditory learning” par. 1). “Kinesthetic learning gets learners active” and can involve moving around the room for learning games or group activities to stimulate the mind (Kleven, et al. “Kinesthetic learning” par. 1).

Finally, reading and writing deals directly with “text-based courses, PDFs, documents, books, and eBooks” (Kleven, et al. par. 1).

Introducing multi-modal learning methodologies to students in a format relating to design and typography may enhance a unique learning environment and reinforce learning strategies. The learning strategies may include repetition and practice to aid in retention.

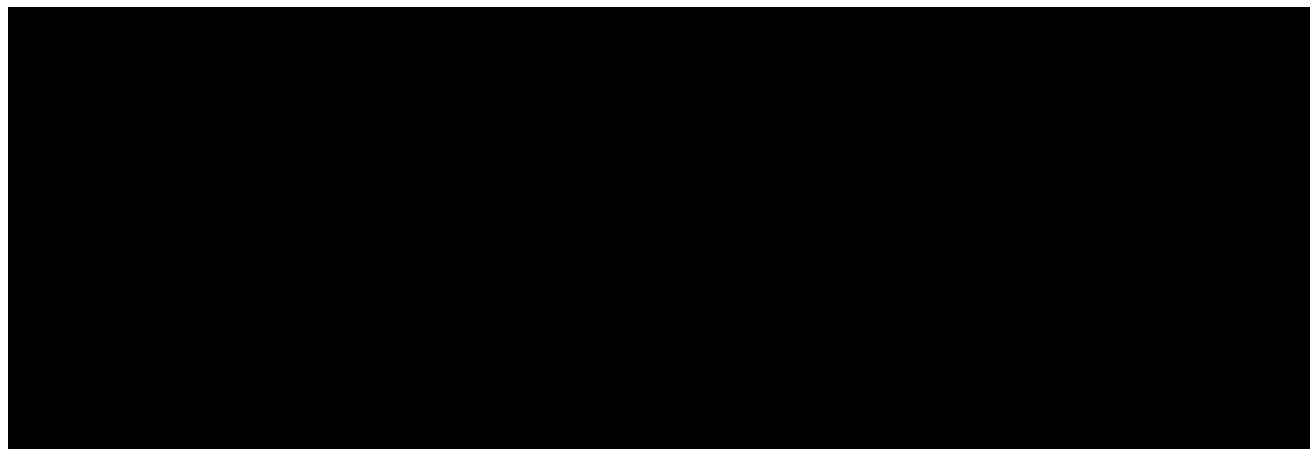
GRAPHIC DESIGN OF TEXT ON READING QUALITY

Findings from another study represented how designing text can benefit readability for students with dyslexia: “A reader affected by the chaotic eye movements caused by the magnocellular system, which manifests itself by impaired visual perfection,” may benefit from increased font size and strategic layout of text on a page (Zikl, et al. 1).



Since dyslexia is “a specific speech disorder of constitutional origin characterized by problems with decoding of individual words, usually reflecting an insufficient capacity for phonological processing,” problems arise with text orientation in design (Zikl et al. 2). Variables affected include “reading performance—speed, correctness, reading technique [and] comprehension”—as well as difficulties with “orientation in the text [and] text reproduction” (Zikl et al. 2). Students with dyslexia may experience confusion especially in the use of letters that have “similar shapes such as b-d-p, a-o-e, m-n, [and] l-k-h,” along with “kinetic inversions [transposition of syllables], skipping or adding syllables, words or sentences, inappropriate use of omission of diacritics or guessing of word endings” (Zikl et al. 2). Many different levels of complexity impact understanding, and a typographic education for students with dyslexia requires a multi-modal approach.

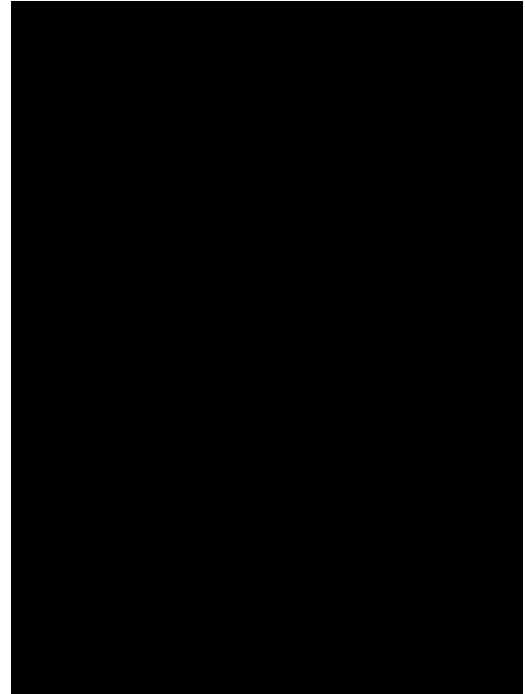
When using typography in design, it is essential to address how pupils with dyslexia see and interact with text from low-level to high-level processing capabilities. According to Zikl, et al., “pupils with dyslexia show a greater number of correctly read words” when text is presented in three specific formats, including S2 “bigger font”, S3 “larger spaces between words and lines,” and S4 the “alternation of bold and normal print” words (Zikl, et al. 4; Table 2). The study indicated that “pupils with dyslexia usually feared reading,



they are demotivated, and if they found one of the texts easier/ more legible, it could be reflected in a more positive attitude towards reading” and type usage (Zikl, et al. 4). Text modifications could lead to a more natural way to interpret

and understand type usage in design and overall readability for those with the dyslexia learning disability (Figure 7).

Benefits were seen when font sizes were more extensive, and more space was provided between lines and words on the page. This research can provide an understanding of how content spacing is vital for easier readability for students with dyslexia. In designing, this same representation can be carried out to create compelling work that can be visually perceived and understood by those students' metacognitive-focused functionality.



EDUCATION

In researching and understanding about educating students with dyslexia, it is vital to understand the learning disability; however, it is also essential to have a strong understanding of the material being taught in order to provide full understanding and clarity of the material. This thesis focuses on teaching typography to college students with dyslexia by focusing on teaching strategies in graphic design education. In gaining a better understanding of current teaching techniques, educators may develop an understanding and new insights into teaching techniques that enhance productivity and retention among students with dyslexia in college-based settings.

HIGHER EDUCATION & INCLUSIVENESS

Another critical factor is inclusion. Students with any learning disability already often feel ostracized by society or peers. The inclusion of these individuals in activities or course material actively benefits self-esteem and boosts

interactivity and learning. Also, allowing students with dyslexia sufficient time to process material before involvement provides a more robust understanding and a strong eagerness to participate in course work and activities. In higher education, students with dyslexia often struggle with “reading, writing, [and] verbal expression”; however, in communication-based design, courses emphasize text differently (Çorlu, et al. 217). “For example, in order to emphasize the meaning of the text, a professional graphic designer utilizes different angles, type sizes, characters, and even irrational layouts just as dyslexics do”; such a practice significantly benefits students with dyslexia, who then learn to visually portray text over standard written format (Çorlu, et al. 217).

“Educational modes [present today] of dyslexia also place importance on the mediating effects of the environment such as inadequate teaching methods, or inadequate exposure to literacy, which exacerbates the difficulties [of having dyslexia in educational environments]” (Riddick 223). For example, “individuals [with dyslexia] may have impairments”; however, “these are only transformed into disabilities by the negative attitudes” of those educating them or by “the society they live in”(Riddick 224). The goal of educating students with dyslexia should not directly focus on one particular student; instead, educators may focus on inclusion through “school reform” (Riddick 225). For “specific learning difficulties and behavior difficulties, [a school’s educational structure] is often the [issue] because [the] school prescribes a narrow band of acceptable behavior or learning which does not accommodate [for] the diversity of [all] student characteristics (Riddick 226). The educational facility must adapt to teaching all learning types with patience and metacognitive learning formats to enhance inclusion, educational performance, and comprehension capabilities for everyone, especially individuals with dyslexia.

For students with dyslexia Pino and Mortar reference how:

a lack of confidence can affect their performance, especially in social situations, such as reading and writing in front of others. Dyslexic students pose a particular challenge to academic staff because their

difficulties are hidden. The possibility of meeting the needs of students with dyslexia and enhancing their learning potential is, therefore, contingent upon their choice to self-identify as having a diagnosis of dyslexia. (Pino and Mortari 347)

Inclusiveness must involve not only peers but also educators. In a study of educators and lecturers, some expressed “skepticism” in regard to a student’s statement that they had dyslexia. In contrast, other educators might state that “there was no point in aiming for higher because you are dyslexic” (Pino and Mortari 358). When an individual with dyslexia is told they cannot complete a task correctly because the educator is not giving them a chance, the student may experience a shutdown or lose the desire to master content. Overall, focusing on inclusiveness and appropriate educational approaches is necessary to provide a well-rounded experience of learning typography and to promote self-esteem and enhance growth and development among individuals with dyslexia.

LIMITED TEACHING STRATEGIES EXIST

Teaching strategies to meet basic accessibility needs exist in some college or universities for students with dyslexia, but outside of these elements, students are left to fend for themselves as if they have no learning disability. Previous studies on graphic design and dyslexia include explorations of reading, self-efficacy, and inclusivity.

Reading studies focus on “the reading quality of pupils with dyslexia in relation to the graphic design of text” where “text modifications chosen [during the study] were those recommended for readers [with dyslexia], i.e., highlighting of syllables, using larger font sizes and spaces between words and lines, in comparison with the font size and line spacing commonly used in reading books” based on the given age group (Zickl, et al. 2). Also, “the graphically modified text will have a positive impact on the reading speed of pupils [with dyslexia] in comparison with the regular [standardized] text” (Zickl, et al. 2).

Self-efficacy studies represent that the “belief that one can successfully complete a task or course of action in a specific context” has been demonstrated and “self-efficacy is one of the most vital intrapersonal capacities in [any] environment” to promote positive behavior and success (Nalavany, et al. 18). Inclusivity, simply the inclusion of all individuals in activities, also enhances self-efficacy. The idea, in any setting, especially a college classroom, is to avoid “low self-esteem [which] results in feelings of unworthiness, inadequacies, and deficiencies” by making the student feel included and capable (Nalavany, et al. 284). Feeling involved and part of a bigger picture may enhance students’ overall self-worth and in turn increase “social competence, problem-solving ability, intellectual ability, self-competence, and worth relative to others” (Nalavany, et al. 284). Ways to enhance this overall feeling of self-efficacy and inclusivity are to adopt the use of dyslexia-friendly marketing and course materials to really allow the student to feel as if they can be easily involved in the process itself, as well as providing easy access to all necessary assistive technology as well as learning

or emotional counseling when needed. These elements, along with course support, may establish an active and engaging learning environment.

“**Graphic design students with dyslexia are taught on the same level of any other student with no regard to their specific needs in order to aid in the ability for those with dyslexia to better understand and process material.**”

The focus on the visuals produced in Chapters 3 and 4 will lead to enhanced learning experiences for students with dyslexia by describing a detailed teaching approach to accompany design course work. The goal is to introduce typography in a step-by-step methodology and through modified tracking and leading.

DYSLEXIA IN DESIGN CLASSES

Studies focusing on design classes are nearly nonexistent; therefore, this section will focus on classroom settings for students with dyslexia in general. Some educational facilities assist students with learning disabilities. Beacon College is one of the leading colleges in the nation that focuses specifically on educating college students with learning disabilities, including dyslexia. The disheartening situation is that most higher education facilities do not see dyslexia as a disability and therefore treat the students as if they were incapable of doing the work.

“Dyslexia affects 10–20% of the population in all literate countries” and is a common disability among college students (Dawson 189). In the current educational system, many institutions do not have a good understanding of how to help students with dyslexia:

Despite the fact that dyslexia has been recognized as a specific developmental reading disability in medically oriented disciplines for over a century (Hinshelwood, 1909; Orton, 1925), the translation of basic science research into improved methods for the instruction of individuals with dyslexia is limited (Alsobhi, Khan, & Rahanu, 2015; Shaywitz, 2008; Wilson & Oxford, 2015), and most of this work focuses on interventions to remediate deficiencies (Grigorenko et al., 2020) or strategies to mediate or compensate for learning challenges (Edyburn 2007; Dawson 189).

College or university institutions do not always address dyslexia as a learning disability and provide limited assistance or accessibility components to students with dyslexia. “Cognitive psychologists [have] insufficiently attended to the experiences of dyslexic people and how different learning contexts and discourses shape the ways dyslexia is understood and managed” (Cameron and Billington 1359). Their conclusions indicate that psychologists seem to “forget that [the] measurements and conclusions are the product of

social processes and therefore not a neutral route to the discovery of facts” (Cameron and Billington 1359). There is also a perception by “some parents, educators, dyslexic people and other members of the public” that dyslexia is not really a learning disability but rather just a set of literacy difficulties and therefore associate the idea of dyslexia with “laziness or stupidity” (Cameron and Billington 1359). The fact that those with dyslexia think this way is a result of societal stigma. Educators must also contend with the perception that students with dyslexia who seek additional help are cheating.

Overall, the focus on dyslexia needs to change so the students can get proper education with accessibility components that will lead to higher self-efficacy in the workforce.

DYSLEXIA IN EMPLOYMENT

Previous findings indicated that “there is considerable evidence that dyslexia affects individuals throughout their lives in many spheres of activity including work” (Nalavany et al. 17). Even with the Americans with Disabilities Act passed to reduce workplace discrimination, “de Beer et al. (2014) found that employees with dyslexia, their employers, and work colleagues all viewed having dyslexia as a disadvantage” (Nalavany et al. 17). Also, an additional study showed that many adults with dyslexia “have lower self-esteem than their non-dyslexic peers and lower job satisfaction” (Nalavany et al. 17).

Knowing that adults often struggle with self-efficacy when entering the work environment, educators’ addressing the issue at a student level to promote self-efficacy, or “the belief that one can complete a task or course of action in a specific context,” could significantly enhance performance (Nalavany et al. 18). A large part of self-confidence is believing in oneself and one’s ability. Self-efficacy also focuses on intention, behavior, motivation, and the ability to execute activities that influence “creative decision making” and work engagement (Nalavany et al. 19).

In working with students with dyslexia, it is critical to focus on enhancing skills through practice and building confidence in skills. This focus will enhance the emotional experience and support better real-life work experiences once students graduate. Focusing on improving self-efficacy early on may reduce impacts of workplace trauma, such as “symptoms of depression or anxiety, insomnia, low self-esteem, feelings of hopelessness, excessive anxiety and worry, irritability, and panic attacks (American Psychiatric Association, 2013)” (Nalavany et al. 18). Once they have built their skills, the students will need to find the ideal fit in their career to enhance self-efficacy.

It is key in developing self-efficacy skills early in the development phase for individuals with dyslexia. The skills, first developed in grade school education, should then be enhanced through college-based education. Students with dyslexia in a college settings should understand their own skills and be able to practice them efficiently and effectively. Building confidence at the college level by teaching career-based skills will provide students with a level of self-efficacy that can lead into the workplace. If individuals with dyslexia enter the workplace with a stronger overall confidence, the adjustment phase should be less detrimental, and those individuals' coping skills will make them more efficient overall.

Looking at these issues in the context of the pervasive lack of self-efficacy and acceptance in the workplace, it is clear there is a problem to be solved. Design can be used to help solve this problem. In developing a system that is implemented in education, especially in graphic design education, students with dyslexia may be provided with a written format that is easier to read and comprehend, which will also aid in their understanding of the use of typography in design.

CHAPTER 3
VISUAL PROCESS

DESIGN PLAN

The plan for the design was to develop resources for an educational approach. The concepts consist of poster development, or print-based materials, as well as an app design or user-interface (UX) development. These tools are meant to provide an approach to understanding typography more easily for students with dyslexia as well as to provide a new approach to presenting typography in a more accessible way for all readers. Aims include improving readability, legibility, and letter interpretation through increased tracking and leading of content. This increase in leading is not highly spaced and not based on the design industry standard. The tracking, or spacing of letters in orders, and kerning, or spacing between two letters, is adjusted just enough to accomplish ease of readability for those with dyslexia. This mild modification does not disrupt the design but increases the audience that can see the material. Providing these design elements in education also helps in explaining typography for students in graphic design. Students with dyslexia will more quickly learn letter recognition as relevant to design quality and be able to develop material they can easily read by applying slight modifications without disrupting industry standards. The design concepts address an adjustment in teaching students with dyslexia so such individuals can understand and better process material in higher education courses.

ADDRESSING THE PROBLEM

The final designs will enrich education and ease the transition to understanding typography in design for individuals with dyslexia, and the material will also initiate a new standard in design that does not heavily deviate from current design standards but only enhances them for people with dyslexia. Research presented the understanding that 1.5 for leading, equivalent to 1.5x the font size or 1.5x the font's automatic leading size, improves the readability for people with dyslexia and all audiences. The type is not spaced so far that it disrupts reading, but it is also not spaced so closely that it causes letter confusion for people with dyslexia.

Through design research and gaining a more robust understanding of dyslexia, the intent was to develop a set of posters and an app that promotes understanding of type arrangement in design and meets accessibility needs. The posters will promote learning typography and learning to see type as an image to understand proper type arrangement using design principles. The mobile application will provide more in-depth education on typography and break down each element, serving as a tool to teach the importance of typography, type arrangement, type hierarchy, and the readability and legibility of type. Since the majority of graphic design work involves typesetting, these are necessary skills to develop. It is essential that educators determine a collegiate educational model that demonstrates and teaches industry standards in typography, type arrangement, and design principles, while presenting content in a manner that is accessible for students with dyslexia.

MOOD BOARD FOR POSTER DESIGNS

Mood boards are a great mechanism for brainstorming and conceptualizing ideas for final designs. Previous research and understanding of typographic arrangement indicated the mood board allows the arrangement of visual information to demonstrate what aspects of the design could be best understood by users with dyslexia.

The mood board shown here references sample color palettes that research indicated are the best color combinations for individuals with dyslexia. The selected fonts were chosen from the British Dyslexic Association's recommendations for fonts that represent best readability and legibility for individuals with dyslexia.

The visual representations of broken letters and typed paragraphs represent how individuals with dyslexia see. Research indicates that no one can truly understand how someone with dyslexia sees, but these visual representations are based on the work of designers who have studied dyslexia and developed visual examples based on feedback in field studies. The designs are meant to represent how individuals with dyslexia describe how they view words. Of course, as research indicated, there are many forms of dyslexia, and no two individuals with dyslexia are the same. Understanding the broad spectrum of the neurological disadvantage supports development of a visual solution that would improve the overall readability and legibility of characters.

Proper Type Use Poster Concept

Spacing + type for users with Dyslexia

One poster shown in 2-3 diff. typefaces

Magazine page layout w/ easier readability w/ Dyslexia

Break up with more visuals + text that gives information more directly

• Making educational materials for student to understand design concepts and use it as a reference to understand design standards that may have been difficult to read before the dyslexia variation.

- Education tools that could be standard.

Stay away from highly ornamental text until design understanding is more advanced.

- larger text
- wider tracking
- bold header
- no underline
- no italic (or limited)

confuses words (run together)

* less crowded text

Focus:

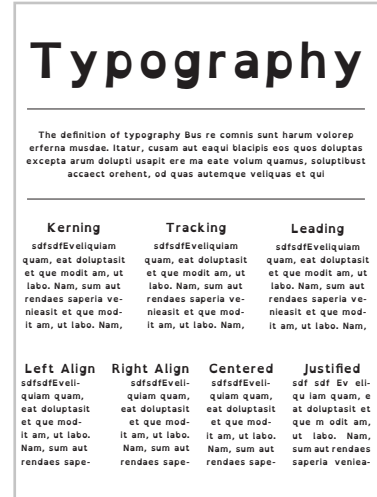
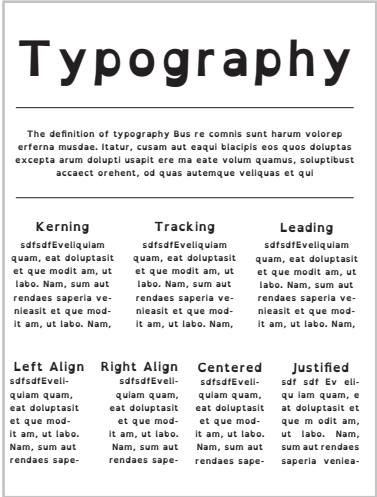
- Bold letters
- Avoid lots of green + red
- Focus on additional Spacing
- Focus on typography choice
- make a design understood by those w/ Dyslexia that can be understood by all

- Typography poster w/ additional Spacing.
- All caps + dyslexia? ~~Unicase~~ ^{won't work}
- Small caps + dyslexia?

- Mix of strong x-height + capitals (larger font + more tracking)

- Poster content?

- Typography Education Poster
- * how can everyone understand but easier for dyslexic?



POSTER SKETCHES AND IDEATION

The sketches were the beginning of the process of ideating and understanding how to develop posters that would best represent design to accommodate people with dyslexia. The ideas in sketching and writing out content were to express the best way, in the early research period, of representing the readable type. More research denoted that spacing between lines (1.5 or 21 points) and higher tracking of words would improve readability in education for students with dyslexia. The samples above represent visual studies of using different types in a spaced-out arrangement

Big Header

Secondary Title



Section Title

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Big Header

Secondary Title

Secondary text that will focus on information which is right aligned.

Section Title

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POSTER SKETCHES AND IDEATION

If they understand which concepts work, educators can identify early concepts that will not provide the best introduction of typography to students with dyslexia in higher education. The posters are a great early introduction as the posters are simple and can also be a hands-on educational design demonstration for course instruction. However, in researching typography, I initially explored concepts that would represent page layout. Upon further research and finding that simple type would be a better representation at first, I decided to no longer approach the idea of the page layout as an early introduction as it might cause confusion and be a more complex example that would be best introduced to more advanced students who already understand typography. Exploration and research are a great way to learn what are the best approaches and what approaches would work better at a later time.

MOOD BOARD FOR MOBILE APP DESIGN

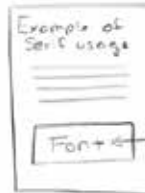
To understand type arrangement research and the components of type spacing and color for individuals with dyslexia, I felt it best to develop a component that accompanies the poster designs and provides an aid to students who need a reference to typography rules as they are learning. The same design rules applied to the posters are to be applied to the app. The mobile app concept, which will be a prototype, will replicate the design concepts and color schemes from the posters to produce a usable tool for students with dyslexia. Students will be able to reference concepts such as type arrangement, type spacing, typography components, and other aspects of typography anatomy and structure. This tool will be usable alongside physical design work to help students understand and promote letter recognition.

Anatomy Of A Typeface

Anatomy Examples + Definitions



Show the term + definition



Choose a font to display styles



Red won't be used or used for tolerance in notes. Red is not ideal for dyslexia. So another option will be chosen.



← content more spaced out for ease of readability

• App - guide for dyslexic students



• Show standard and more spaced
spaced
 ability to adjust

• Drawing feature to draw typefaces or typeface types?

• Anatomy breakdown?

• Reader?

- Type Properties
- Definitions
- Type Classifications
- Type Pairs
- Readability / Legibility
- Examples + Anatomy

MOBILE SKETCHES AND IDEATION

The sketches pictured represent my ideas of what would make the best assets in a mobile app to accompany the study of graphic design by students with dyslexia. The sketches illustrate several examples, including type anatomy, with each letter representing one specific component of anatomy and then a definition to explain. The app will allow students to search concepts quickly and provide useful information about specific elements, such as type anatomy, type arrangement, type alignment, and other basic typography elements in design.

Typography

An Educational
Tool Guide

Type Definitions

Type Anatomy

Type Alignment

Type Families

Type Styles



Typography Definitions

Q search

A

Absolute Measurements

Measurements that have fixed values and expressed with finite terms in measurement.

Anchor Point

Anchors content to a specific point in in written text so that the content moves as the text is modified.

Anti aliasing

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P
Q
R
S
T
U
V
W
X
Y
Z
A



Type Anatomy

Q search



Serif

A stroke or line that extend beyond the characters form. This can be seen in the image above.

MOBILE APP

The mobile application's final concept is a secondary tool that students can use as a study guide. The app follows the same guidelines as the posters and derived from design research. Fonts with tracking and appropriate leading can be applied based on discoveries of what is best for students with dyslexia. The app would pair as a reference piece. When students are working, whether they have dyslexia or not, they can reference the app to understand key terms and other functional components of typography. The early stages of the app focused on finding a layout that would benefit students with dyslexia, as well as provide visual and written components. The auditory elements would be read with the reader built into the device.

COURSE FINAL

**TYPOGRAPHY COLLEGE COURSE
FOR STUDENTS WITH LEARNING DIFFERENCES**

BRITTANY STROZZO | ARTS 524 - ADVANCED TYPOGRAPHY

TYPOGRAPHY CURRICULUM

The typography course curriculum developed in the Advanced Typography class at Liberty University was the main inspiration behind the thesis topic. In the Advanced Typography class, I developed a course curriculum that I could be presented and implement to teach college students with learning disabilities in my current position as a college instructor. The college decided it would be a great addition in developing this curriculum as no typography courses were currently offered. The course was adapted in the fall 2021 semester as a topics class and will again be submitted as a topics class in the fall of 2022. The end goal is to take what I have learned from this thesis, adapt all the knowledge to improve this course for the fall 2022 semester, then push for the course to be adapted into the college course catalog as a permanent course for the web digital majors. Understanding how to better represent typography to individuals with dyslexia has paved the way to understanding how to promote better readability in all aspects of graphic design for the design industry.

COURSE FINAL

TYPOGRAPHY COLLEGE COURSE FOR STUDENTS WITH LEARNING DIFFERENCES

BRITTANY STROZZO | ARTS 524 - ADVANCED TYPOGRAPHY

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ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 2

PROJECT OVERVIEW

COURSE PROJECT

The goal will be to develop an in-person course curriculum designed for graphic design college students with learning disabilities (LDs). The layout of the course and structure of content will be simplified for ease of understanding with both lecture and hands-on exercises and projects. The goal is to develop a curriculum with the rigor of other colleges but on a level that individuals with different LDs, ranging from ADHD to Autism, can understand. This requires making sure that content provided each class is multimodal, focusing on combining the three elements, each class, of being visual, hands-on, and auditory-based, or spoken.

PHASE 1

Phase 1 will include a strategic breakdown of the course. Phase 1 starts with a syllabus that details all of the vital reference content about the course for students. The syllabus will contain all of the information including, but not limited to, contact information, office hours, communication components, course description, course purpose or objectives, learning goals and outcomes, any required textbooks, materials for the course, additional resources, course policies, and expectations, school-based policies for behavior, attendance, and other needed school rules, learning resources, and course schedule. The syllabus can often include the course rubric and any additional content about labs or classroom after hours policies.

The syllabus is critical for understanding an outline of what will be taught in the course. Once this is complete, the additional part of phase 1 will be planning all content for the classes. Such planning includes an outline of each day and what is required and expected from students. It will also include learning outcomes and student self-evaluation components.

Course content will be broken down into five projects that reference the above research topics. Students will be provided with lectures, developed in phase 1, and each lecture will provide content, examples, student-interaction components, and in-class hands-on exercises/homework before project assignments.

In short, phase 1 will represent the skeleton of the course and the rubric.

PHASE 2

In phase 2, I will begin working on the five projects that will need to be developed for the course. Phase 2 will include the development of project content and designing out an example of each project to give the LD students a reference piece. I will also look online to provide more variations to inspire the students. The LD students do not typically think as critically or strongly as non-LD students, and therefore it is always best to provide them reference pieces to begin their work; this helps with the multimodal learning aspect.

The next portion would be to represent how each project will be evaluated with the rubric.

Phase 2 will also provide time for the development of the self-evaluation quizzes better to understand each student's mindset on the learning process.

In short, phase 2 will represent the development of all content that is design related and provide document examples as well as self-designed examples. Content will also be written out per project and per lecture breaking down the steps learned for those classes. Hence, students have a visual reference for when they need to work on assignments outside of class and need a quick refresher on what was learned that day, as well as what tools are most effective. Each project will also denote the proper program to use.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 4

PHASE 2 SUMMARY

In phase 2 I have created the homework and project assignments. Due to time constraints with another week of student crisis moving 1D students all online with various anxiety disorders, the focus of the assignment has shifted just slightly. The content you find here is the development of the projects and homework assignments only. As I move into next week and work on the research paper, the goal will be to continue working and developing the course lectures. I will also be developing my own personal representations of what each project final should look like, outside of the examples provided in the projects below. At this point, I have developed the course syllabus, rubric, course schedule, all general information regarding student work and participation as well as the homework and projects listed below.

Moving into week 7 and 8, I will be developing the rest of the material to have all lectures and samples included in the final presentation. Together this will be compiled into a teacher handbook that is set up in order from the start to the end of the semester. The notebook will have added features that include references and notes regarding how each section will be taught, in case the book was ever passed on to another professor.

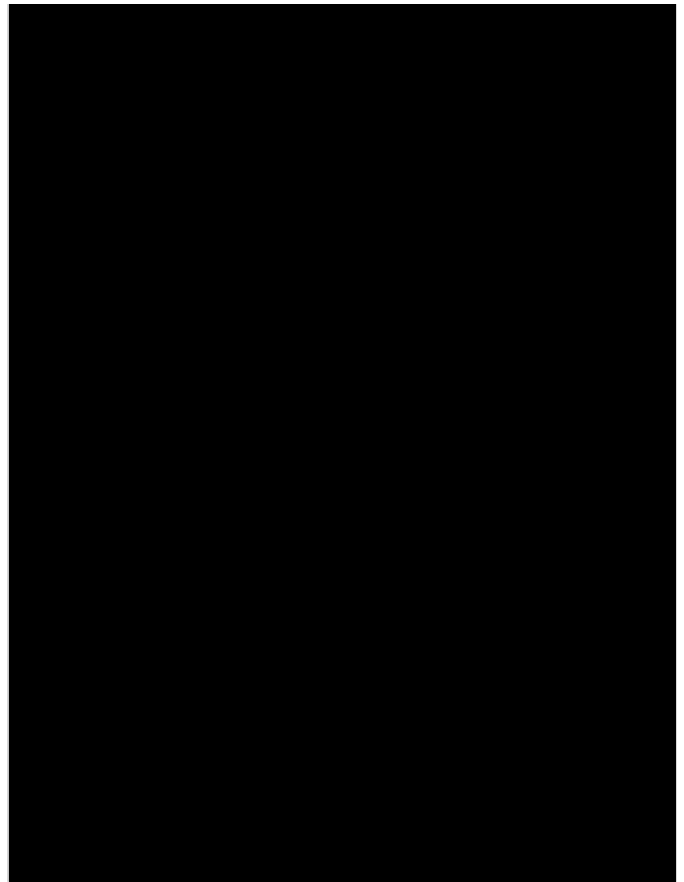
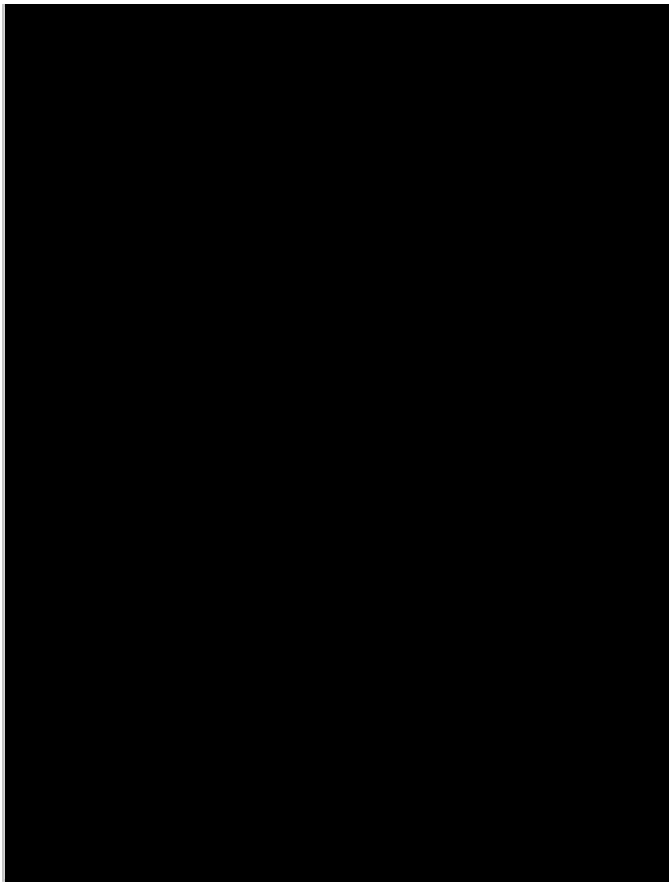
FINAL

The final project will be combined from phase 1 and phase 2 into a teacher portfolio. In the same idea of developing a process book, I will design out all content, including syllabus, lectures, handouts, projects, and so forth. All content will be designed in a uniform format using Adobe InDesign and in color. As with current courses, students are provided with color-based printouts for easy reference between classes. In short, I will provide color headers and other design elements to enhance the visual representation of each component. The teacher portfolio for this Typography course will include everything needed to get someone started in teaching, as well as the examples. All content developed will be organized and categorized based on the syllabus schedule.

FINAL SUMMARY

The course really allowed total focus on course development, however with the switch to everything online due to the outbreak of the coronavirus, the time that was originally allotted for the assignment was cut short due to my full-time teaching job taking students with learning disabilities, who have never had online school, into an online environment. In doing so, 50-60 hours of my work was allocated to work, leaving me working on assignments partially during the week and full-time during the weekend. In this situation, the focus on designing the shell of the curriculum became my main focus. Also, the development of a lecture sample became the only lecture development, leaving the rest to be something developed prior to course instruction. Finally, instead of developing final designs, due to time constraints, the focus was to find examples online that met the needs of the assignments to give students strong and varied examples of final solutions. In moving forward, my goal will be to design on concept for each.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 5



PLANNING PROCESS

SYLLABUS

Below is the mapping out and breakdown of content that would be valuable to be included in the course syllabus for the Typography class.

Typographic Syllabus	
- college name	- late assignments
- course name	- attendance/
- spring 2020	- tardy policy
- instructor	- online possible
- phone number	- politics
- Office #/location	- VA attendance
- email	- TX homework
- class info (time)	- class withdrawal
- id	- field trips
- office hours	- course schedule
- required text and outline	
- supplies	- music
- additional sources	- classroom/lab
- domains	- policies
- course objectives	- professionalism
- graphic tools	
- project breakdown by grade %	
- rubric	
- academic policy	
- exams	

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 11

PLANNING PROCESS

COURSE SCHEDULE PLAN

Below is the mapping out and breakdown of course content. Content is placed left to right.

Week 1 Class

- Syllabus
- Welcome to Typography

Week 2 Class

- Learning to design on page 21

Week 3 Class

- Learning to design on page 22

Week 4 Class

- Learning to design on page 23

Week 5 Class

- Learning to design on page 24

Week 6 Class

- Learning to design on page 25

Week 7 Class

- Learning to design on page 26

Week 8 Class

- Learning to design on page 27

Week 9 Class

- Learning to design on page 28

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 12

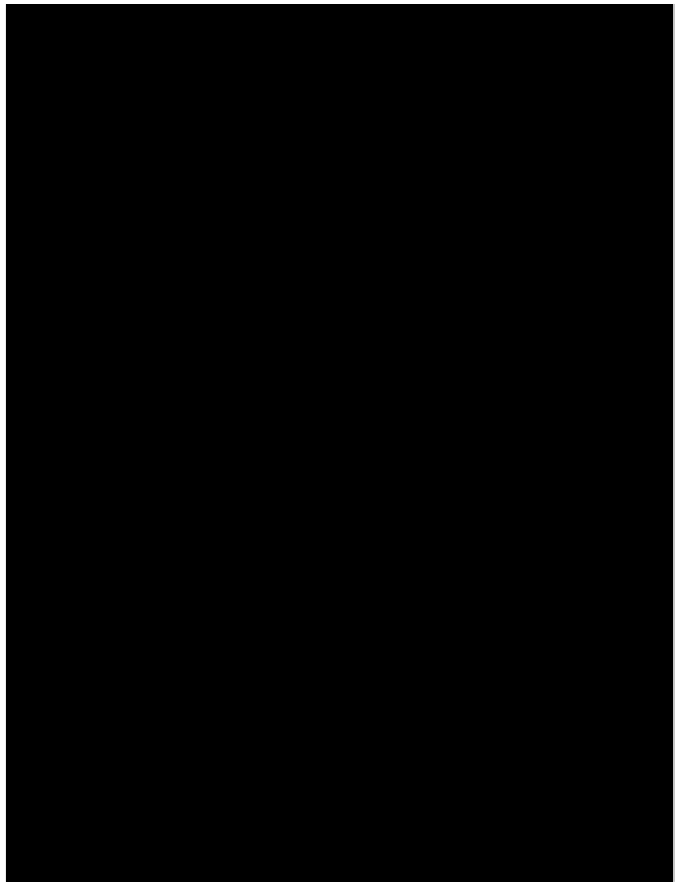
PLANNING PROCESS

COURSE SCHEDULE PLAN

Below is the mapping out and breakdown of course content. Content is placed left to right.



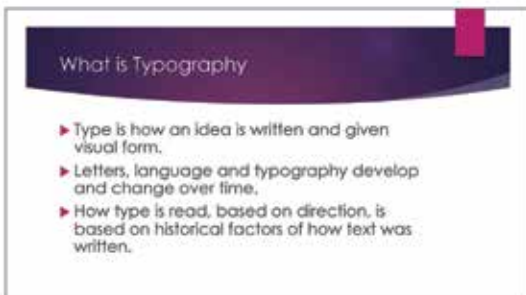
ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 13



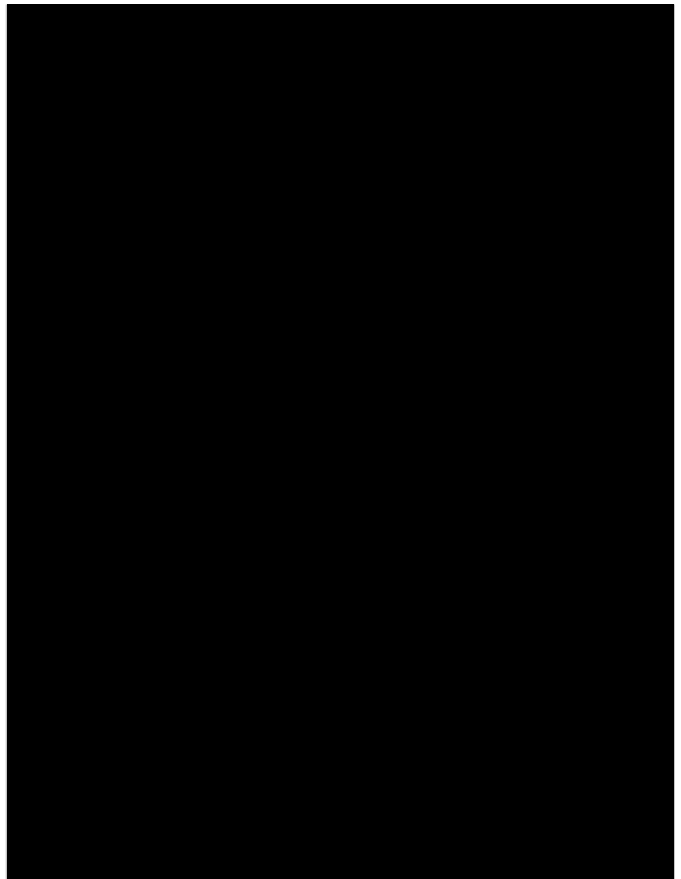
LECTURE EXAMPLE

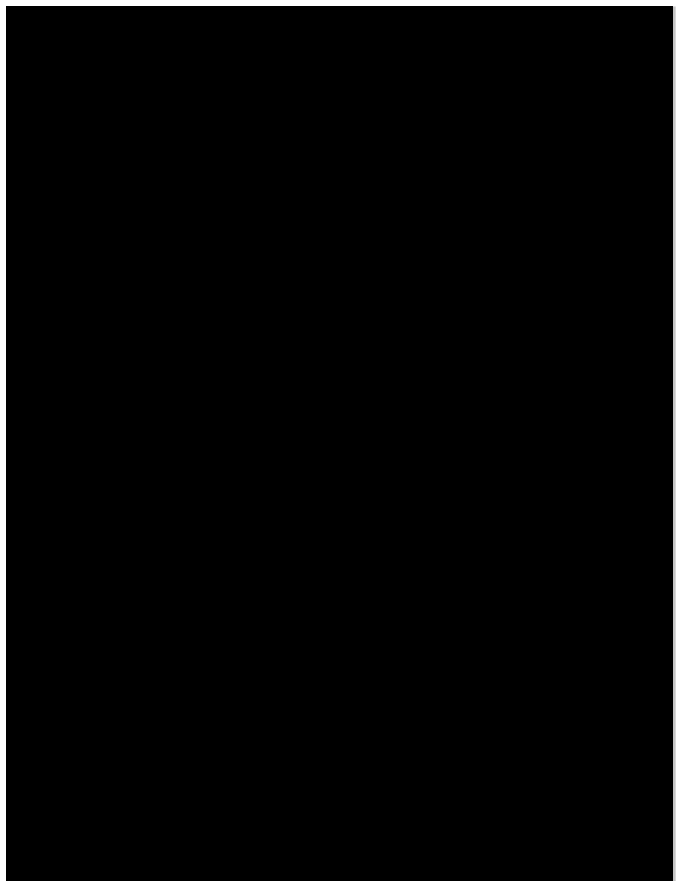
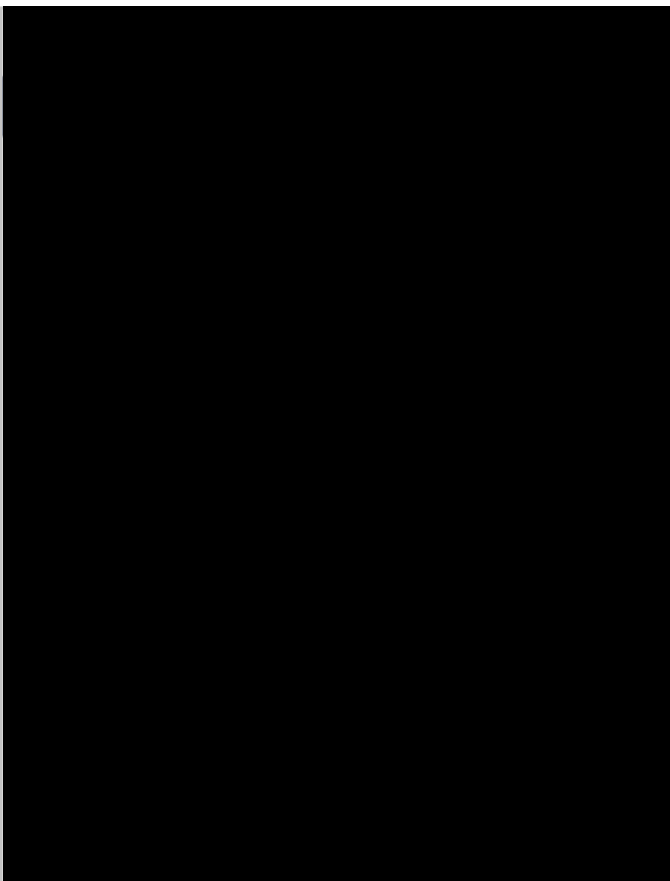
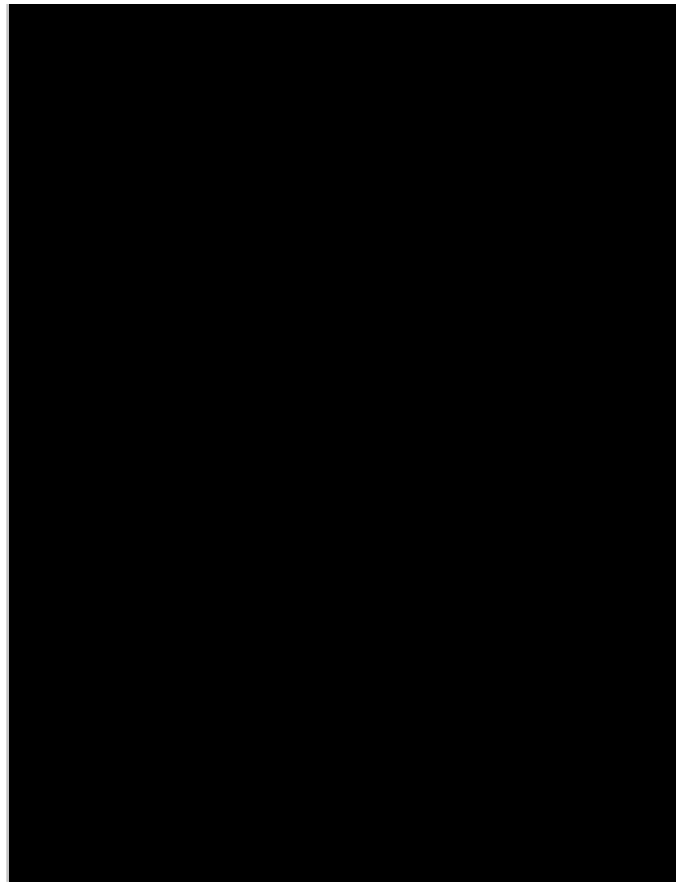
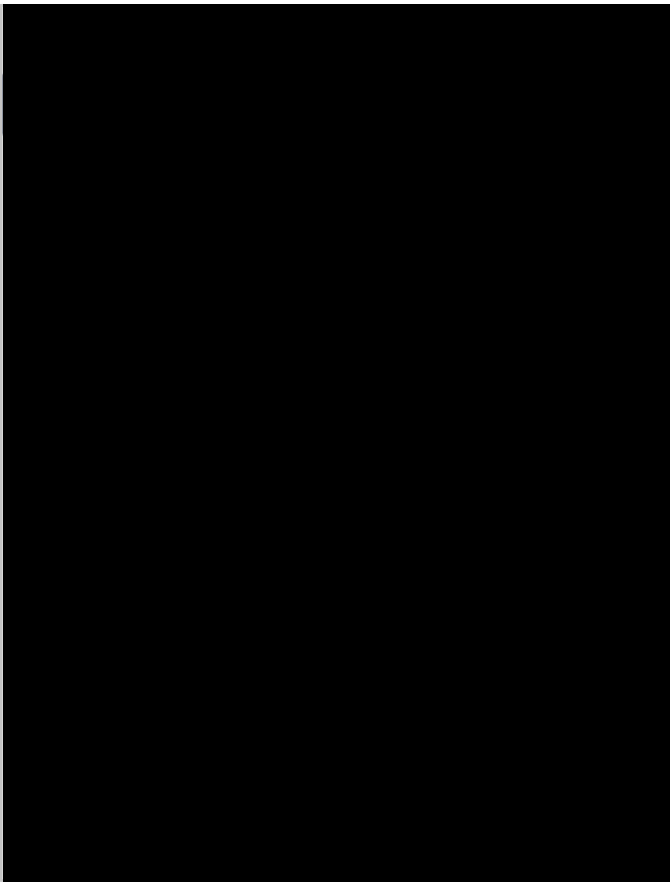
LECTURES

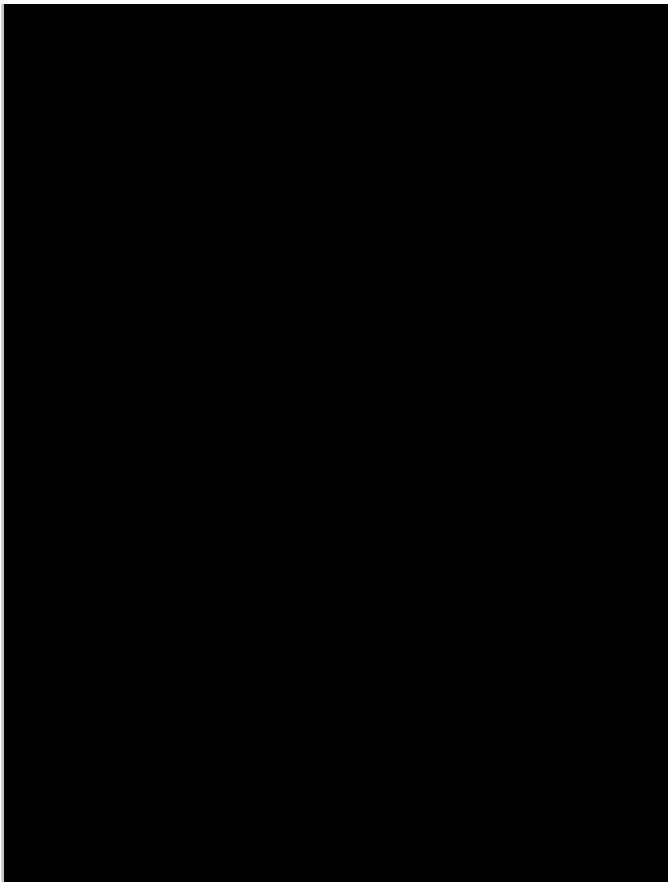
The slides included below were developed for a publication design course and will be modified and represent the example of the lectures that will be developed and presented for the students.



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 15







BEACON COLLEGE
INSTRUCTION TO TYPOGRAPHY
 DIG 3000
 SPRING 2021

Instructor Brittany Stozzo
Phone 352-787-0000
Office Office 11 - Building 109
Email bstozzo@beaconcollege.edu

Class Time Monday & Wednesday 9:00-10:15 a.m.
Open Lab See Posted Hours
Office Hours Tuesday & Thursday 12:00-1:30 p.m.
 Friday 10:00 a.m.-1:00 p.m.
 Other times available by appointment only.

REQUIRED TEXT & SUPPLIES

- No textbook will be required for this course. Handouts and other course materials will be available in both printed and digital formats. Digital files will be provided on the Mac Server.
- Students are required to purchase a jump drive or harddrive in order to backup all digital files from the class. Students will also be able to save files on a designated student folder located on the Mac Server. Students may also choose to backup files on their own cloud-based service.
- Materials for note-taking and note-organization are necessary to bring to each class.
- Laptops are not required but are strongly suggested for work outside of the lab.

COURSE REQUIREMENTS

- Adobe Creative Cloud account login is required to access all Adobe applications while in the Media Lab.
- Required prerequisite for this course: Visual Communications.

ARTS 904-ADVANCED TYPOGRAPHY | COURSE FINAL | 22

COURSE DESCRIPTION

Typography is the technique and even art form of arranging type in such a way that it represents the written language in legible, readable and arranged in various display methods. This introductory course introduces students to the use of typography in graphic design relationships. Typography is taught through the lens of history and is broken down into its anatomical structure. Students will learn how to use typography effectively and intentionally through layout and hierarchical arrangement.

LEARNING OUTCOMES

At the completion of this course, students will understand the fundamentals of Typography and be able to:

- Develop content with appropriate typography use and hierarchy.
- Use Adobe InDesign and Illustrator to effectively map out typography-based designs.
- Gain and understanding of how typography is used effectively in the environment and the world around them.
- Insert text and format text correctly with appropriate typeface pairing, size, kerning, track, scaling, and other similar typography elements.
- Save and export documents in various industry-standard formats.
- Practice an increased level of emotional intelligence and be able to also exhibit it. Measured through exercises and testing emotional reaction before instruction is given and after.

GRADING SCALE

A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	<60

ARTS 904-ADVANCED TYPOGRAPHY | COURSE FINAL | 23

FINAL GRADE PERCENTAGES

PROJECTS (70%)

Typography-based design projects (individual development) or hands-on assessments. **5 projects for this course (14% each).**

PROFESSIONALISM (20%)

Professionalism is determined on overall class participation, student attendance, course preparation and materials management, overall appearance when in class, behavioral considerations, and the practice of ethical decision-making.

HOMEWORK ASSIGNMENTS (10%)

Assignments provided for students to work in independently to gain hands-on practice outside of the classroom. This will test the students ability to retain information from the class as well as provide individualized thinking and learning strategies to improve design confidence.

DELIVERING ASSIGNMENTS

As in any design course, all content is comprehensive and each assignments builds off of the previous assignment or lecture-base content. Due to the fact that the course is comprehensive, late assignments, those assignments later than 2 class periods, will not be accepted. Students looking to redo projects must find time outside of class to redevelop content.

ARTS 904-ADVANCED TYPOGRAPHY | COURSE FINAL | 24

ACADEMIC INTEGRITY POLICIES

Plagiarism is defined by the American Heritage Dictionary of English Language as the use and passing of ideas and/or writings that are owned by another. When using sources, place information in quotation marks.

Cheating is defined by the American Heritage Dictionary of English Language as the taking of content from an exam/test or completing any assignment in a dishonest way. This includes improper access to other's design work or answers.

Fabrication is defined by the American Heritage Dictionary of English as the use of untruthful or false statements in any work submitted.

Students are responsible for the authorship of work they submit. Plagiarism, cheating and any type of fabrication are NOT acceptable on any terms and those students whose work provides evidence of any academic dishonesty are subject to the following sanctions.

Sanctions

- 1. First Offense** - Student will receive a written warning and work must be revised. There will be a grade reduction penalty for the revised work at the faculty member's discretion. All students committing a first offense will be required to complete an online plagiarism module that is available in the Writing Center. The Academic Integrity Assessment must be passed with a score of 80% or higher.
- 2. Second Offense** - Student will receive a zero for the work submitted.
- 3. Third Offense** - Student will receive a referral to the Department Chair. The Department Chair will decide the next course of action, which may include the student receiving a failing grade for the course and/or course withdrawal.

Academic Integrity Violation Responses

- Any academic dishonest procedures and disciplines will be considered first and reviewed by the faculty member that is teaching the course.
- The next step is for the Department Chair to review all allegations and the Department Chair's approval is needed for academic sanction.
- If an academic sanction is needed, the student will be notified with his/her right to appeal to the Department Chair and, if there is no conclusion reached, then the sanction is passed on to the Vice President of Academic Affairs.
- If the student chooses to appeal any allegation or academic sanction beyond that of the Department Chair, the case will go to the Vice President of Academic Affairs for a final verdict.

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 25

EXAMS

If take home exams are given to students, the exams must be submitted by the scheduled exam date. There is no exception for late submission of take home exams except for extreme extenuating circumstances. Any extreme circumstances must be approved by the Office of Academic Affairs.

LATE ASSIGNMENT POLICIES

Late assignments are accepted by the following circumstances:

- Missed Assignment Deadline** - If the assignment is submitted by the class following the assigned deadline, students will be given a letter grade drop (10% penalty).
- 2 Class Periods Late** - If the assignment is submitted two class periods past the assigned deadline, students will be given two letter grade drops (20% penalty).
- 3 Class Periods Late** - Assignments will not be accepted and the student will receive a 0.

Example: The essay was due on the Monday class deadline, but submitted during the next scheduled class period on Wednesday. The student's grade will drop from an A to a B or a B to a C. If the essay is submitted two classes late the grade will drop from an A to a C. Three class periods late is an automatic F for the assignment.

The lateness policy will be adjusted accordingly for any emergencies/extenuating circumstances.

TITLE IX

Title IX provides a clear understanding of violence and harassment based upon sex and gender. These are Civil Rights offenses and subject to the same accountability standards as offenses against people due to race, national origin, etc. If you know someone, or if you are affected directly through harassment or assault, reach out to your appropriate Title IX coordinator and let them know immediately. All information is confidential and provided to keep you safe and protected. Contact info@beaconcollege.edu with your report or to get more information about Title IX.

RUBRIC CATEGORIES:

- Critical Thinking** - Creativity, Problem Solving, Conceptualization
- Applying Your Skills** - Design, Tool Use/Understanding, Production
- Professionalism** - Class Participation, Ethical Decision-Making, Appearance, Behavior, Attendance, Project and Assignment Participation

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 26

ATTENDANCE POLICY

All students are always expected to be present and on time for all scheduled course times and days. Any work that needs to be made up due to tardies or absences is the responsibility of the student. All student are responsible for knowing and understanding the policies for making up any work as is outlined in the syllabus for each course.

- 1st & 2nd Absences:** Students will be informed of absences and a second absence will receive a written warning.
- 3rd Absence:** Interventions are taken into consideration for the third absence in an attempt to improve the student's overall attendance. Learning specialists will be notified and a final written warning will be sent to the student.
- 4th Absence:** The fourth absence will lead to a letter grade drop for the student's final grade.
- 5th Absence:** The fifth absence, based on the discretion of the faculty member and the Vice President of Academic Affairs, will lead to the student being withdrawn from the course.

Four tardies, where students are more than 10 minutes late to the class, will lead to an absence. Tardies are given at the discretion of the faculty member teaching the course.

VA ATTENDANCE POLICY

Any tardies or absences from part of any class will lead to an absence for the course. If the student receives four absences from any class during any month of the semester that student will be reviewed for termination from Veterans Benefits for unsatisfactory attendance.

FIELD TRIPS

There are no required field trips for this course. If a student needs to attend a field trip for another class, the instructor must inform of circumstances and time frames two days prior to the event. Missed field trips may require compensatory work. If a student misses class due to another field in another course, they are required to schedule time to make up missing work.

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 27

COURSE SCHEDULE

The following assignments are always subject to change as various conditions in the class may dictate such changes. All changes are made at the discretion of the instructor. Class participation affects professionalism grade and is expected in all courses.

Class sessions include hands-on training, class projects, homework to reinforce learning and provide practice, makeup credit for missed assignments or projects, and other lecture and demonstration materials that are crucial for understanding and development.

January 18	Martin Luther King Jr. Holiday
January 20	<ul style="list-style-type: none">SyllabusIntroduction to Typography Presentation
January 25	<ul style="list-style-type: none">Typography History Part 1 LectureHomework: Create Your Own Cuneiform Writing (due January 27)
January 27	<ul style="list-style-type: none">Cuneiform homework due at the start of class (2.5%)Typography History Part 2 Lecture
February 1	<ul style="list-style-type: none">Type Anatomy LectureClass Activity: KERNTYPE Game
February 3	<ul style="list-style-type: none">Foundations of Typography LectureHomework: Type Exercise (due February 8)
February 8	<ul style="list-style-type: none">Type Exercise homework due at the start of class (2.5%)The Golden Rule of Typography, Type Terminology, and Letterforms LectureHomework: Type Terminology Review (due February 10)
February 10	<ul style="list-style-type: none">Type Terminology Review due at the start of class (2.5%)Type in the Environment LectureProject 1: Create Type in the Environment (due February 17)
February 15	President's Day Holiday (Students work outside of class on assignment)

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 28

February 17	<ul style="list-style-type: none"> Project 1 due at the start of class (14%) Class Critique (participation grade) Typography Review with Class Typography Game Activity
February 22	<ul style="list-style-type: none"> Legibility and Readability Lecture Type as Emotion Lecture Project 2: Express Emotions with Typography (due March 8)
February 24	<ul style="list-style-type: none"> Project 2 Work Day
March 1	<ul style="list-style-type: none"> Project 2 Work Day
March 3	<ul style="list-style-type: none"> Project 2 Work Day
March 8	<ul style="list-style-type: none"> Project 2 due at the start of class (14%) Class Critique (participation grade) Type Use on the Web Lecture Homework: Find 3 examples of Effective Type Use Online (due March 10)
March 10	<ul style="list-style-type: none"> Type and Proper Type Use Lecture
March 15	Spring Break Holiday
March 17	Spring Break Holiday
March 22	<ul style="list-style-type: none"> Introduction to Typography Poster Project Project 3: Typography Poster (due March 31)
March 24	<ul style="list-style-type: none"> Project 3 Work Day
March 29	<ul style="list-style-type: none"> Project 3 Work Day
March 31	<ul style="list-style-type: none"> Project 3 due at the start of class (14%) Class Critique (participation grade) Type as Image Lecture Project 4: Type as Image Poster (due April 19)
April 5	<ul style="list-style-type: none"> Project 4 Work Day

April 7	<ul style="list-style-type: none"> Project 4 Work Day
April 12	<ul style="list-style-type: none"> Project 4 Work Day
April 14	<ul style="list-style-type: none"> Project 4 Work Day
April 19	<ul style="list-style-type: none"> Project 4 due at the start of class (14%) Class Critique (participation grade) Type Layout and Type on a Grid Lecture Homework: 3 Examples of Excellent Type Layout in Magazines (due April 21)
April 21	<ul style="list-style-type: none"> 3 Examples of Type Layout in Magazines due at the start of class (0.5%) Layout Design with Typography Lecture Project 5: Type and Layout Design (Magazine or Newspaper Page Design) (due May 5)
April 20	<ul style="list-style-type: none"> Project 5 Work Day
April 20	<ul style="list-style-type: none"> Project 5 Work Day
May 3	<ul style="list-style-type: none"> Project 5 Work Day
May 5	<ul style="list-style-type: none"> Project 5 due at the start of class (14%) Class Critique (participation grade)

RUBRIC

		A "Wow" Extraordinary	B "Good Quality" Well Done	C Complete	D "Ok" Acceptable	F "Unsatisfactory" Unsatisfactory
Critical Thinking	Concept	Insight of Relating Concepts	Interesting or Engaging Concept	Ordinary Concept of Each	Stating or Offending	Weakness of Concepts
	Assignment	Understood the assignment and problem. Exceeded a professional level of understanding.	Understood the assignment and met the project requirements.	Understood the assignment and met the project requirements.	Understood the assignment partially. Met at least 80% of project requirements.	Did not understand the assignment and was not able to satisfy the requirements.
Applying Your Skills	Layout	Elements are arranged creatively and the overall design is high impact.	Elements are well placed and produce an overall pleasing design.	Elements are placed in a way that the design is functional.	Elements are missing and positioned at random or somewhat positions.	Elements are missing making the design unattractive, unprofessional, or too easily understood.
	Type	Font choices are to the design and represent clear hierarchy. Clarity or clear type use.	Font choices are to the design and represent clear hierarchy. Clarity or clear type use.	Font are readable and adequate but need improvement.	Font are readable but poorly placed and type size and placement is inconsistent.	Font are not legible or readable. Poor choice of font size, spacing and placement.
	Color	Color helps reinforce concept and evokes an emotional response. Follow a color palette.	Colors help to reinforce the design and enhance the overall message.	Colors are used complementarily and consistently.	Colors clash and interfere with legibility and text. Lack of color consistency.	Color use is inconsistent to style and there is no color coordination or balance.
	Image Editing	Image manipulation is well executed and combined creatively and creatively.	Images are well edited with good technique used.	Image editing techniques are taught and used effectively.	Four image editing techniques, images are understood and clearly distinguished.	Weak image manipulation images are missing or improperly manipulated.
	Tool Use	Tool use is highly creative and evidence of experimentation is evident.	Understands the tools and effectively uses them to an individual level.	Familiar with the tools available but struggles with software use.	Minimal understanding of the tools and requires repetitive assistance.	Unfamiliar with the tools and the software. Unable to work independently to complete tasks.
Ethics	Resources & Research	Excellent preparation for assignments. Deep understanding of the subject.	Effective preparation for assignments. Good understanding of the subject.	Basic preparation for assignments. Limited understanding of the subject.	Limited preparation for assignments. Needs constant assistance with subject material.	No preparation for assignments. Little to no knowledge of the subject.
	Working Like a Pro	Use of ethical decision-making skills with display of strong professional business practices.	Ethical decision-making shows good judgment toward to high standards, technology use, and best business.	Qualitative decision-making shows good judgment toward to high standards, technology use, and best business.	Limited decision-making shows good judgment toward to high standards, technology use, and best business.	Operational with no decision-making skills that require professional business practices.
	Delivery	Assignments are complete, delivered as or upon deadline, and include neat, above and beyond.	Assignments are complete, accurately developed and delivered on time or before.	Delivered on time with minor missing elements. Usable.	Delivered incomplete and the projects usability is limited.	Incomplete and project is unusable.

CLASSROOM AND MEDIA LAB POLICIES

- Rules of etiquette that must be practiced while working in the Media Lab:
- Treat others courteously with equal levels of respect and dignity.
 - Students that are not actively enrolled in the class are not permitted in the classroom.
 - Students are not to work on content that does not pertain to the course they are actively attending. Do not work on another classes assignment while another instructor teaches.
 - All mobile devices, social media, games, and videos may be used for academic purposes, only when deemed necessary.
 - Students are not allowed to install or remove hardware or software on any of the computers. Students are only permitted to backup files.
 - Treat the equipment with respect and do not mistreat it (i.e., do not hit the computer, bang on the keyboard, etc.).
 - If there is an issue with any computer you are using, do not fix it yourself. Let your instructor know or contact the IT Helpdesk.
 - A black and white printer is available in the Media Lab for use and prints 8.5 x 11 inch sheets. Printing is permitted for school work and educational purposes only.
 - If files are left by another student on the desktop, do not place in trash. Make sure you drag the files into the "Lost and Found" folder located on the desktop so students can retrieve them at a later time.
 - Make sure you always back up your work on a jumpdrive and in your Student Storage folder located on the Mac Server.
 - Never tamper with any Server files that belong to other students.
 - The lab has an open seating policy. The instructor may see it fit to assign seats or reserve seating for specific students.
 - Student's are never allowed to use the instructor's station or chair or search in any of the instructor cabinets unless otherwise instructed by the faculty member.
 - Food is not permitted in the labs. Sealed drink containers containing water only are allowed and must be placed on the floor or back table.
 - Always leave the workstations clean after each class. Do not leave your papers or any materials behind for other students to throw away.

Preparation & Responsibility

- Be prepared when you arrive to class. Bring needed items (i.e., books, files, tools, etc.)
- Save your work often and make sure you always backup content in two locations.
- Content must be delivered on time or before as late work is not accepted beyond two missed scheduled course days.
- Excuses are not accepted and are irrelevant. Do not make excuses for your behavior.

Behavior

- **Determination** - Do you stay committed to a presented challenge or problem until a resolution is reached?
- **Accountability** - Do you take responsibility for the actions you commit?
- **Self Control** - Are you able to remain calm and control your emotions during stressful situations?
- **Considerate** - Can you share the spotlight with other individuals in your class?
- **Open Minded** - Are you able to listen and appreciate other points of view?
- **Patience** - Are you patient? Are you able to wait your turn without feeling the urge of restlessness or feeling of being upset?
- **Detail-oriented** - Do you aim for overall accuracy and precision in the work you create?
- **Inquisitive** - Are you curious about things you don't understand?

Class Participation

- Remain positive and pay attention during course instruction.
- Participate in class discussions and share comments and observations.
- Do not ramble about content that is not relevant to the class.
- Do not dominate conversations and allows others a turn to speak and participate.
- Questions are always welcome but do not ask excessive questions. If you have a lot of questions, wait until after class or individual work time.

Appearance

- It is important to maintain a professional casual appearance. Please do not wear clothing that shows a lot of skin or clothing that contains inappropriate content. Make sure clothing covers the body effectively and also focus on wearing clean clothing.
- Refrain from wearing strong perfumes, as some are allergic to strong chemicals, and focus on proper hygiene.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 35

CUNEIFORM WRITING

HOMEWORK ASSIGNMENT
DUE JANUARY 27, START OF CLASS

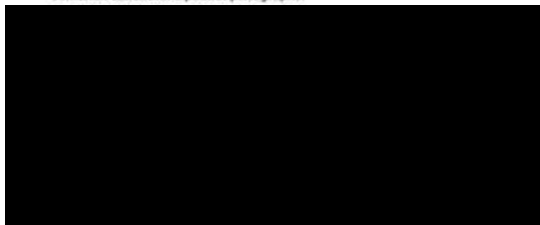
OVERVIEW

Cuneiform is known as being one of the first ever recorded writing formats in existence. The cuneiform writing format, known as pictographs, is a form of writing with symbols to represent meanings or words. When the symbols are documented properly, they form letters and words so that concepts can be communicated, much like a coded message you have to decipher.

ASSIGNMENT INSTRUCTIONS

The goal of this homework is to understand how language and communication function when you don't have actual words. **Keep your answers in words or short sentences.** The assignment is graded based on completion and will count as a participation grade.

1. First, answer the following questions in English.
2. Next, use the Sumerian alphabet provided below to rewrite your answers in Sumerian cuneiform alphabet pictographs.



QUESTIONS

Answer the following four questions in English first then cuneiform. Keep your answers short. You are encouraged to use another sheet of paper, or the back of this one, to complete the assignment. **The assignment must be handwritten and cannot be completed on the computer.**

1. What is your name?
2. What is your favorite food?
3. What is your major?
4. What is your favorite hobby or activity?

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 35

TYPE EXERCISE

HOMEWORK ASSIGNMENT
DUE FEBRUARY 8, START OF CLASS

OVERVIEW

Using different fonts, write out the following sentence to see how different typefaces look side by side. The sentence to use is:

"Typography is great for graphic design."

ASSIGNMENT INSTRUCTIONS

1. Choose 10 different fonts and use Microsoft Word.
2. Double space lines at 14 pt font.
3. Make sure the sentences appear on a new line each time, with each new typeface.
4. Submit final files in a folder named Lastname-Web to the Mac Server.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 36

TYPE TERMINOLOGY REVIEW

HOMEWORK ASSIGNMENT
DUE FEBRUARY 10, START OF CLASS

Match the following terms together to review everything we have learned so far in class. Please refer to the lecture to find the answers to the questions below.

- | | |
|----------------|------------------------------------------------------|
| 1. Stroke | A. Part of the letter that goes below the baseline. |
| 2. Ascender | B. Two letters, or more, joined together as one. |
| 3. Serif | C. Without line, or without serif. |
| 4. Stem | D. Any linear element. |
| 5. Descender | E. Part of the letter that rises above the x-height. |
| 6. Ligature | F. Slanted typeface. |
| 7. Sans-serif | G. A vertical stroke in a letter. |
| 8. Italic | H. A short line or stroke at the end of a letter. |
| 9. Baseline | I. Height line of lowercase letters. |
| 10. Cap-height | J. Space between letters. |
| 11. X-height | K. An imaginary line that the letters sit upon. |
| 12. Tracking | L. Space between lines of text. |
| 13. Kerning | M. Marks the top of uppercase letters. |
| 14. Leading | N. Space between characters. |

ARTS S24-ADVANCED TYPOGRAPHY | COURSE FINAL | 37

EFFECTIVE TYPE USE ONLINE

HOMEWORK ASSIGNMENT
DUE MARCH 10, START OF CLASS

OVERVIEW

The goal of this assignment is to go online and find **three** effective uses of typography on the web. The images can be from any site, but must be advertising something to an audience. The content found must be visually appealing and well edited. Review today's lecture if you have any questions regarding what to look for in regards to strong typography uses online. Lecture can be found on SONIS.

ASSIGNMENT INSTRUCTIONS

1. Find three examples of effective type use on the web/online.
2. Screen capture websites or save the images as JPG or PNG files.
 - Screen Capture keyboard shortcut on an Apple Computer: **Cmd+Shift+4**
 - Screen Capture keyboard shortcut on a PC: **Frt+PrtScn**
3. Name your files as follows:
 - Lastname-Web1
 - Lastname-Web2
 - Lastname-Web3
4. Submit final files in a folder named Lastname-Web to the Mac Server.



ARTS S24-ADVANCED TYPOGRAPHY | COURSE FINAL | 38

EFFECTIVE TYPE USE IN MAGAZINES

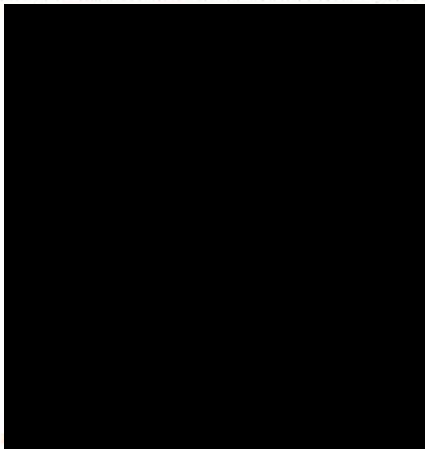
HOMEWORK ASSIGNMENT
DUE APRIL 19, START OF CLASS

OVERVIEW

The goal of this assignment is to look through magazines and find **three** effective uses of typography. The images can be from any site, but must be advertising something to an audience. Once you have found advertisements or articles that use type effectively, cut them out or scan the advertisements or articles and bring them into class to discuss. Review today's lecture if you have any questions regarding what to look for in regards to strong typography uses in magazines. Lecture can be found on SONIS.

ASSIGNMENT INSTRUCTIONS

1. Find three examples of effective type use in a magazine or magazines.
2. Photograph, cut out, or scan your found images.
3. Files should be printed out and submitted together. Please include your name.



ARTS S24-ADVANCED TYPOGRAPHY | COURSE FINAL | 39

TYPE IN THE ENVIRONMENT

PROJECT 1
DUE FEBRUARY 17, START OF CLASS

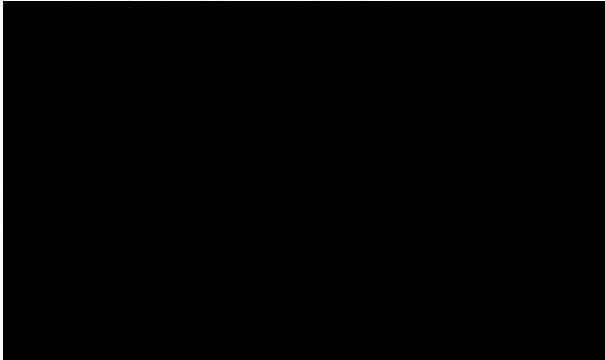
OVERVIEW

Type surrounds us everywhere we go, from content on posters to installations that are predominately art. Also, type can be seen on driving signs or crosswalk signs to provide direction or warnings. However, type can also occupy unexpected areas in the environment, and use the environment to create the words. Type does not have to be computer generated, but it can be created from anything around us and in turn must still retain legibility and readability to be effective.

ASSIGNMENT INSTRUCTIONS

This exercise provides you with the practice of creating readable and legible type with what you find in your everyday environment. The goal is to choose a word, then illustrate that word with objects that correlate to the meaning of the word itself. The type can be cursive, script, decorative, sans-serif, etc.

1. Create your letter in the environment.
2. Using a camera, or phone, photograph your final creation.
3. Save the image as Lastname-Typeenvironment.
4. Final submissions should be .JPG or .PNG and 150ppi.



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 41

EXPRESS EMOTIONS WITH TYPOGRAPHY

PROJECT 2
DUE MARCH 8, START OF CLASS

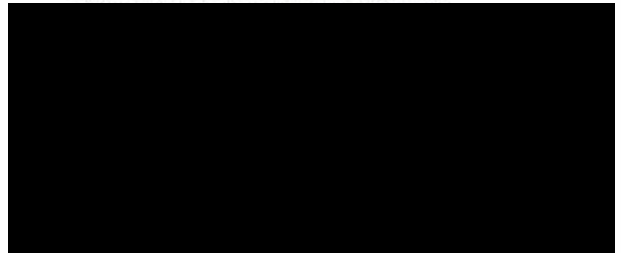
OVERVIEW

Typography is not only the visual relay of language, it represents much more. Typography can be represented by a well written and laid out book that can be read easily, or typography can be seen as an interpretation of emotion. Typography can rely more than just words, it can provide a visual representation or emphasis on word-based meaning. If a designer uses the wrong typeface, the reader may feel confused or disconnected from what is being communicated. Typography is more than written meaning, typography is an expression of self and content.

For this assignment, students will visually address a word and its meaning using only typography. The goal is to choose a word that can be easily interpreted visually and then visually interpret the meaning alongside the physical word.

ASSIGNMENT INSTRUCTIONS

1. Choose a word that is based on emotion.
2. Choose a typeface, or font, that best represents your emotion.
3. Using only type, represent the meaning of the word. Note: words can be stacked, overlapped, and laid out in any format. Just make sure that the original word itself is still readable or legible.
4. Develop your final using Adobe Illustrator.
 - Document Size: 8 x 8 inches
 - Resolution: 150ppi
5. Save the final file as a PDF labeled Lastname-TypeEmotions



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 42

TYPOGRAPHY POSTER

PROJECT 3
DUE MARCH 31, START OF CLASS

OVERVIEW

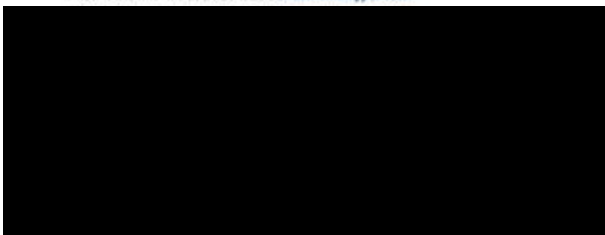
Research a font of your choice. Next, you are to gain an understanding of the Typographer who designed the chosen font, understand the history of the Typographer, find out why the font was created and its use, as well as other valuable information including but not limited to the creation date, birth of the Typographer, heritage of the font and Typographer, and so forth. If the individual developed multiple fonts, you are to choose only one font.

After you have thoroughly researched your Typographer and the font you are going to use, write down your research in a 250-word document. This content will be included on your final poster design.

In developing a strong understanding of a font and the Typographer who created it, develop a poster using Adobe Illustrator that illustrate the font and information about the Typographer in a unique format.

ASSIGNMENT INSTRUCTIONS

1. Research a Typographer and one font.
2. Write a 250-word explanation from your research.
3. Develop your final using Adobe Illustrator.
 - Document Size: 11 x 17 inches (vertical or horizontal)
 - Resolution: 150ppi
 - Must display the full alphabet of the font, font name, and Typographer's name.
 - Must display your written research and a cohesive color palette.
4. Save the final file as a PDF labeled Lastname-TypePoster



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 43

TYPE AS IMAGE POSTER

PROJECT 4
DUE APRIL 19, START OF CLASS

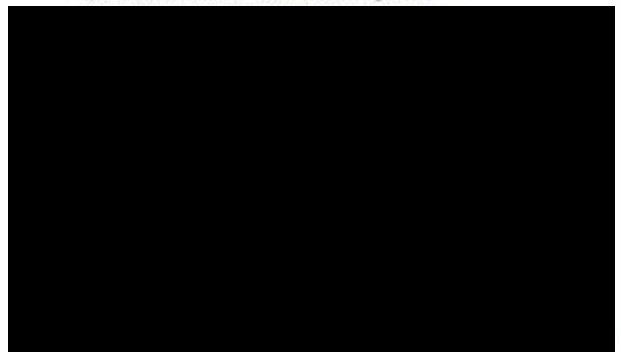
OVERVIEW

As discovered in previous assignments, type can be used to write out the written language, but it can also be used to illustrate imagery with extended meaning. Logos are a strong example of how letters are styled to represent a visual interpretation of an organization. In short, letters of type can be repositioned to reconstruct their meanings through visual representation.

ASSIGNMENT INSTRUCTIONS

Discover a topic that interests you. Based on that topic, illustrate the concept using words to represent the concept. No images can be used because the typography must be positioned to make the image while representing words that represent the idea.

1. Create a poster 11 x 17 inches (horizontal or vertical) in Adobe Illustrator.
2. Select a topic that interests you.
3. Illustrate the concept with words only. Use only words that relate to the topic and place the words so that they illustrate the idea. Make sure words vary in weight and size. Don't use more than one font, but make sure the font has a full type family.
4. Save the final file as a PDF labeled Lastname-ImagePoster



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 44

TYPE AS IMAGE POSTER

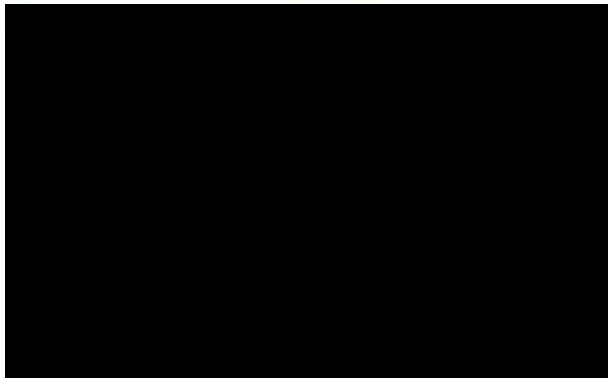
PROJECT 4
DUE APRIL 19, START OF CLASS

OVERVIEW

Using the techniques of layout design learned this semester, and information from the final lecture, the goal of this assignment is to develop a magazine page that represents strong typography use.

ASSIGNMENT INSTRUCTIONS

1. Magazine page is 8.5 x 11 inches (letter size) and created in Adobe Illustrator.
2. Select a topic that interests you.
3. Develop a magazine page with images and proper typography use.
4. Save the final file as a PDF labeled Lastname-Final



ARTS S24-ADVANCED TYPOGRAPHY | COURSE FINAL | 43

WEEK 1

Syllabus Review

Breaks down all components of the syllabus and the importance of it to students. Aids in understanding of course requirements, grade standards, schedule, and other important academic aspects.

Introduction to Typography Presentation

This lecture will provide the basic overview of typography to students. Since course materials is not taught during this class, the introduction presentation will provide an overview of type anatomy, hierarchy, grids, readability, legibility and other factors that summarize the meaning of typography in design.

**SUNY COLLEGE
INTRODUCTION TO TYPOGRAPHY
ENG 200
SPRING 2023**

Instructor: Brittany Stinson
Phone: 516-751-6000
Office: 2700A 11 - Building 109
Email: bstinson@sunysoc.edu

Class Time: Monday & Wednesday 9:00-10:20 A.M.

Open Lab: Open Planned Time

Office Hours: Tuesday & Thursday 10:00 A.M. and Other times are available

REQUIRED TEXT & SUPPLIES

- No textbook will be required. Supplies are provided and may be purchased on campus. Students will be responsible for their own supplies.
- Materials for note taking and laptops are not required but recommended.

COURSE REQUIREMENTS

- Adobe Creative Cloud access (Student License)
- No textbook will be required for this course. Digital handouts and other class materials will be provided via print-out only and on the Mac Server.
- Students are required to purchase a jump drive or hard drive in order to backup all digital files from the class. Students will also be able to save files on a designated student folder located on the Mac Server.

What is Typography

- Type is how an idea is written and given visual form.
- Letters, language and typography develop and change over time.
- How type is read, based on direction, is based on historical factors of how text was written.

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WEEK 2

Typography History Part 1 Lecture

The first installation will focus on historic typography writing styles up to icons today and the overall importance of semiotic-base writing styles.

Homework: Create Your Own Cuneiform Writing

Allows students to see aspects of the lecture, part 1, in a fun and hands-on experience creating their own written statements using Cuneiform markings.

Typography History Part 2 Lecture

This continues on aspects of typographic uses in history, focusing more on how the letters were used and laid out versus just focusing on the writing itself.

**CUNEIFORM WRITING
HONORS/IB ASSIGNMENT
DUE JANUARY 27, START OF CLASS**

OVERVIEW

Cuneiform is known as being one of the first text-recording systems for human civilization. The cuneiform writing system, which predates a system of writing with symbols to represent meanings of words. What the symbols are (the characters) is the letters and words on that system can be understood, much like a coded message you have to decipher.

ASSIGNMENT INSTRUCTIONS

The goal of this homework is to understand how language and communication function when you don't have actual words. **Along your journey to words or short sentences, the assignment is a guided exercise to complete and then create your own words.**

1. Read, access the following questions in English.
2. Read, use the Roman alphabet provided below to write your answers in Roman numerals and understand the questions.

QUESTIONS

Answer the following questions in English and Roman numerals. **Along your journey to words or short sentences, the assignment is a guided exercise to complete and then create your own words.**

1. What is your name?
2. What is your favorite food?
3. What is your sport?
4. What is your favorite hobby or activity?

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WEEK 3

- **Typography Anatomy Lecture**
Understanding the breakdown of type structure and layout.
- **Class Activity: KERNTYPE Game**
Online game to help students understand proper kerning.
- **Foundations of Typography**
Focus on typographic measurements, practices, and the impact of type in design.
- **Homework: Type Exercise**
Focus on understanding how type looks visually with different typefaces.

TYPE EXERCISE

HOMEWORK ASSIGNMENT
DUE FEBRUARY 8, START OF CLASS

OVERVIEW
Using Affinity 2 fonts, write out the following text in one font, then adjust the spacing and size by one. The document is due at 11:59 PM.

ASSIGNMENT INSTRUCTIONS

1. Choose 10 different fonts and use Microsoft Word.
2. Double space lines at 12 pt font.
3. Make sure the sentences appear on a new line each time with set size options.
4. Submit final file as a letter-sized Landscape PDF on the file server.

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WEEK 4

- **The Golden Rule of Typography, Type Terminology, and Letterforms Lecture**
In-depth focus on typography layout, terminology and use.
- **Homework: Type Terminology Review**
Matching assignment to review type terminology learned in class.
- **Type in the Environment**
An approach to not only understand marketing in the world on signs and other environmental locations, but also focuses on development of type outside of using the computer as the instrument.
- **Project 1: Create Type in the Environment**

TYPE TERMINOLOGY REVIEW

HOMEWORK ASSIGNMENT
DUE FEBRUARY 15, START OF CLASS

Answer the following questions to review terminology learned in class. Place your answers in the box provided for each question below.

1. Stroke	A. Part of the letter that goes below it
2. Ascender	A. Two letters, or more, going together
3. Tail	A. Different font, or different word
4. X-height	A. Top of the letter that goes above it
5. Descender	A. Part of the letter that goes below it
6. Spacing	A. Character between letters
7. Kerning	A. Part of the letter that goes above it
8. Lead	A. Amount of space between letters
9. Baseline	A. Height from the bottom of letters
10. Cap height	A. Space between letters
11. X-height	A. An imaginary line that the letters sit on
12. Tracking	A. Space between lines of text
13. Kerning	A. Space between letters
14. Leading	A. Space between lines of text

TYPE IN THE ENVIRONMENT

PROJECT 1
DUE FEBRUARY 17, START OF CLASS

OVERVIEW
This assignment is designed to give you an opportunity to explore the world of typography outside of the computer. You will go out into the world and take photos of interesting typography that you see in the environment. You will then use these photos to create a poster that you will display in the classroom. You will also use these photos to create a poster that you will display in the classroom. You will also use these photos to create a poster that you will display in the classroom.

ASSIGNMENT INSTRUCTIONS

1. Go outside your house to take photos.
2. Bring a camera, or phone, that you can use to take photos.
3. Take photos of interesting typography that you see in the environment.
4. Bring photos back to class.
5. Create a poster with the photos.

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WEEK 4

- **Typography Review with Class Game Activity**
Matching card game developed from material in prior exercises and assignments that students will work together on to answer and solve in order to review material learned so far in the course.

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WEEK 5

- **Legibility and Readability Lecture**
Focuses on typography use with visual representations of legible type, readable type, readable type that is not legible, and legible type that is not readable. This lecture provides visual examples of the differences in the terms so that students can easily make associations.
- **Type as Emotion Lecture**
Develops an understanding of how type can be used to relay emotion, just as images are able to represent emotion physically.
- **Project 2: Express Emotions with Typography**
Students will choose a word and using only type represent what the word means.

EXPRESS EMOTIONS WITH TYPOGRAPHY

PROJECT 2
DUE MARCH 8, START OF CLASS

OVERVIEW
Typography is not only the visual aspect of language, it represents much more. Typography can be represented by a word, a phrase, or a sentence that can be used to convey a message. Typography can be used as an interpretation of emotion. Typography can only mean what you intend it to mean. It can possibly convey a message or emotion based on how it is designed using the many features. The main idea is to use typography to express a word, a phrase, or a sentence. The main idea is to use typography to express a word, a phrase, or a sentence.

ASSIGNMENT INSTRUCTIONS

1. Choose a word that is based on emotion.
2. Create a typographic word that best represents your emotion.
3. Using only type represent the meaning of the word. Make sure you use the correct font, size, and color to represent the emotion.
4. Display your final work using Adobe Photoshop.

• Document Size: 8.5 x 11 inches
• Resolution: 300dpi

3. Save the final file as a PDF named Submission_Typography

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WEEK 6

- **Project 2 Class Work Periods**

Students work in class on assignments so they are able to receive one-on-one feedback and critique as work is in progress.

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WEEK 7

- **Type Use on the Web Lecture**

Understand different typefaces used on the web and the reasons behind why.

- **Homework: Find 3 Examples of Effective Type Use Online**

- **Type and Proper Type Use Lecture**

General strategies to using typography correctly.

EFFECTIVE TYPE USE ONLINE

HOMEWORK ASSIGNMENT
DUE MARCH 26, START OF CLASS

OVERVIEW

The goal of this assignment is to go online and find **three** effective uses of typography on the web. The images can be from any site, but must be advertising something to an audience. The content should be visually appealing and well-edited. Please do not include if you have any questions regarding when to find the in regards to strong typography you can email artss24@psdsd.net or DM me.

ASSIGNMENT INSTRUCTIONS

1. Find three examples of effective type use on the web online.

2. Create a screenshot of each of the images as .JPG or .PNG files.

→ Screen Capture tool used on an Apple Computer: <https://www.apple.com/apple-usb-camera/>

→ Screen Capture tool used on a PC: <https://www.microsoft.com/en-us/windows/using-the-screenshot-tool>

3. Name your files as follows:

→ **Lecture-Web1**

→ **Lecture-Web2**

→ **Lecture-Web3**

4. Submit final files in a folder named **Lecture-Web** to the Mac Server.



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WEEK 9

- **Week 8 is Spring Break - No Class**

- **Introduction to Typography Poster Project**

Demonstration and breakdown of what is expected for the assignment.

- **Project 3: Typography Poster**

Students study a typographer, include the font, information about the typographer, and other valuable font-based information to enhance the poster.

TYPOGRAPHY POSTER

PROJECT 3
DUE MARCH 31, START OF CLASS

OVERVIEW

Research a font of your choice. Next, you are to gain a understanding of the Typographer who designed the chosen font, understand the history of the Typographer. Find out why the font was created and its use, as well as other valuable information including but not limited to the creator does, both of the Typographer heritage of the font and Typographer, and so forth. If the individual developed multiple fonts you are to choose only one font.

After you have thoroughly researched the chosen Typographer and the font you are going to use, only then you research in a 200-word document. This content will be included in your final poster design.

In developing a strong understanding of a font and the Typographer who created it, describe a poster using Adobe Illustrator that includes the font and information about the Typographer in a unique format.

ASSIGNMENT INSTRUCTIONS

1. Research a Typographer and one font.

2. Write a 200-word explanation from your research.

3. Develop your final using Adobe Illustrator.

→ Document Size: 11 x 17 inches (vertical or horizontal)

→ Resolution: 150dpi

→ Must display the full alphabet of the font, font name, and Typographer's name.

→ Must display your written research and a cohesive color palette.

4. Save the final file as a PDF labeled **Lecture-Poster**



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WEEK 10

- **Type as Image Lecture**

Students learn how typography can be used as an image, rather than being just readable or legible words. Type does not have to just be sentences in a book.

- **Project 4: Type as Image Poster**

Students use type to develop an image. The type must also represent the image.

TYPE AS IMAGE POSTER

PROJECT 4
DUE APRIL 15, START OF CLASS

OVERVIEW

As discussed in previous assignments, type can be used to write and the written language. But it can also be used to illustrate imagery with intended meaning. Logos are a strong example of how letters are used to represent a visual interpretation of an organization. In short, letters of type can be manipulated to reconstruct their meaning through visual representations.

ASSIGNMENT INSTRUCTIONS

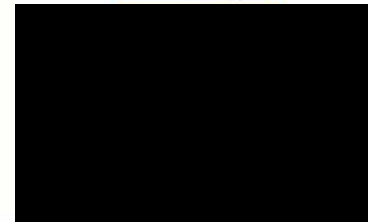
Develop a topic that interests you. Based on that topic, illustrate the concept using words that represent the concept. No images can be used because the typography must be positioned to make the image of the representing words that represent the idea.

1. Create a poster 11 x 17 inches (horizontal or vertical) in Adobe Illustrator.

2. Select a topic that interests you.

3. Illustrate the concept with words only. Use only words that relate to the topic and place the words so that they illustrate the idea. Make sure words vary in weight and size. Don't use more than one font, but make sure the font has a full type family.

4. Save the final file as a PDF labeled **Lecture-ImagePoster**



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WEEK 11-13

- **Project 4 Class Work Periods**

Students work in class on assignments so they are able to receive one-on-one feedback and critique as work is in progress.

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WEEK 14

- **Type Layout and Type on a Grid Lecture**

Students learn how typography should be focused on a grid structure, especially when working with print-based typography design and type layout for publications.

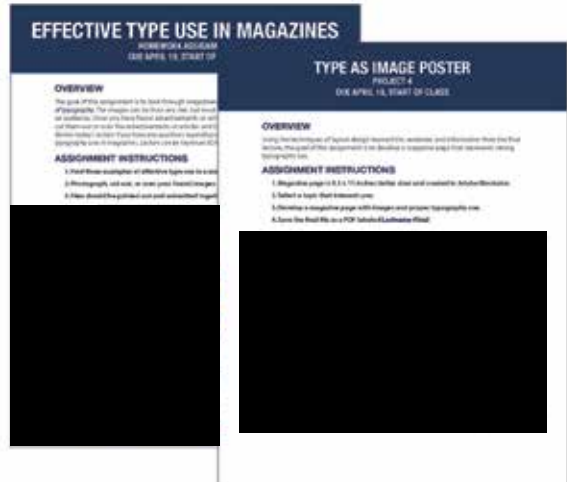
- **Homework: 3 Examples of Excellent Type Layout in Magazines**

- **Layout Design with Typography Lecture**

Continuing the emphasis of type use in layout design.

- **Project 5: Type and Layout Design**

Students will develop a magazine or newspaper page.



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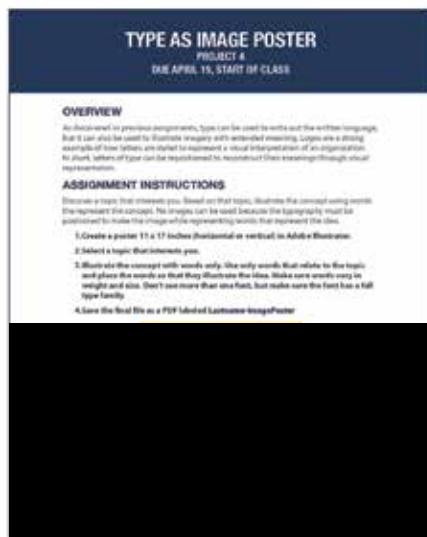
WEEK 15-16

- **Type as Image Lecture**

Students learn how typography can be used as an image, rather than being just readable or legible words. Type does not have to just be sentences in a book.

- **Project 4: Type as Image Poster**

Students use type to develop an image. The type must also represent the image.



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 59

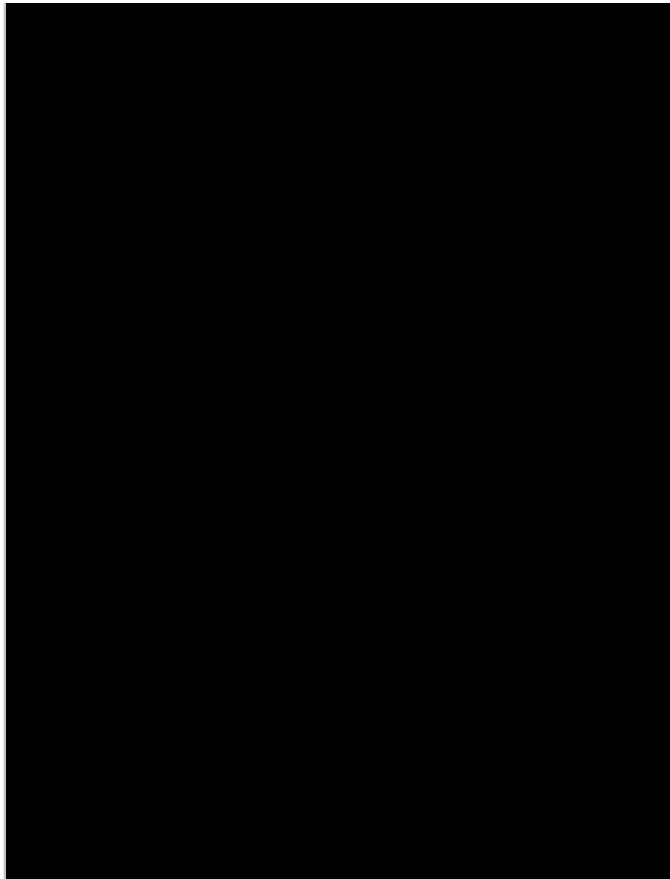
WEEK 16

- **Project 5 Class Work Periods**

Students work in class on assignments so they are able to receive one-on-one feedback and critique as work is in progress.

- **Final and Makeup Projects Due**

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 60



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Type

Facts

CHAPTER 4
FINAL SOLUTION

Typography

The arrangement of letterforms into words or sentences which are displayed visually as blocks of type, similar to letterpress type. Typography also focuses on the layout of type in a given negative space to develop a uniform and informative design.

Elements of Type

Kerning

Kerning is the adjusting of space between two letters or characters only.

ke

Tracking

Tracking is the adjusting of space between multiple letters or characters at once.

tracking

Leading

Leading is the adjusting of space between lines of text. Here is an example of 35pt leading in a sentence.

Hierarchy

Variations in type size, color and style that direct the viewers eye on the page.

Larger & Bold

Smaller secondary text

Alignment

Left aligned text aligns to the left of the page and is preferred for reading.

Center aligned text aligns to the center. For titles and emphasis.

Right aligned text aligns to the right. Used for secondary or caption text.

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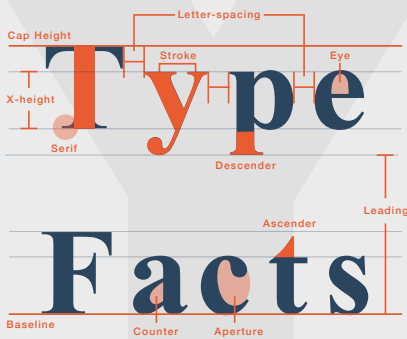
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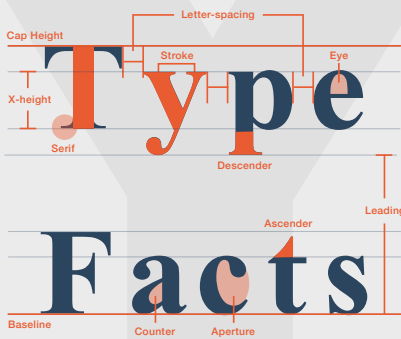
Typography

Anatomy of Type



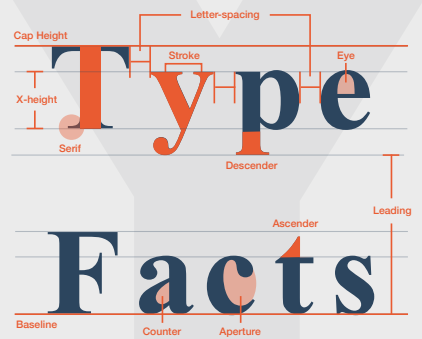
Typography

Anatomy of Type



Typography

Anatomy of Type



VISUAL SOLUTION #1 – POSTER

Following extensive research, and through educational experiences, evidence indicated that the best approach to teaching typography to individuals with dyslexia is focusing on following the British Dyslexia Association’s writing standards for dyslexia, and then transferring those into the principles of graphic design with a typography emphasis. The principles of design include the proper use and visual placement of imagery and text in regard to alignment, hierarchy, contrast, repetition, proximity, balance, color, and space.

The posters will serve as an instructional tool in teaching students with dyslexia about typography. The posters will not only serve as a guide but also an in-class demonstration that students will also work to build. Students will be shown three posters, side-by-side. One poster will represent excessive tracking that will pose readability issues for all students. The second poster will represent a tracked representation of the poster presented in a way that is more visually readable to students with dyslexia or individuals with other visual impairments and equally as readable to individuals without dyslexia. The final poster will represent the current industry standard without tracking applied. The three examples provide a reference for students with dyslexia. The students will be able to focus on the posters, examine the letters, understand the concepts, and then use the tools and skills they have to develop the poster and practice design as they learn key typography components.

Finally, the color palette in the posters is ideal for individuals with dyslexia. It applies a soft play of colors and a non-white background to enhance overall readability. Underlining that is applied to headers is far enough from the words that it will not disrupt readability, and type leading, or space between lines, is different in each poster. The idea for this educational material was inspired by the typography material in a Liberty University course I teach for students with learning disabilities (see Appendix A & B).

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Larger & Bold

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Poster 1 representing high tracking and moderate leading. The tracking for the main top header is 260pt, the subtitles are 180pt and leading is 30pt. This excessive tracking and leading will disrupt readability and make reading slower and more difficult for all audiences. This is a class example of what not to develop.

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Poster 2 representing medium tracking. This level of tracking is easy on the eye for all viewers and leading is only slightly exceeding standards. Studies represent a moderate tracking and leading. The letter-spacing or tracking of the headers are 90pt and the body copy is 30pt. The leading is 1.5x the size of the font, which is the standard explained in research. The font is 19pt so the leading is 28.5pt. The same measurement works for 1.5x the automatic leading set for a typeface.

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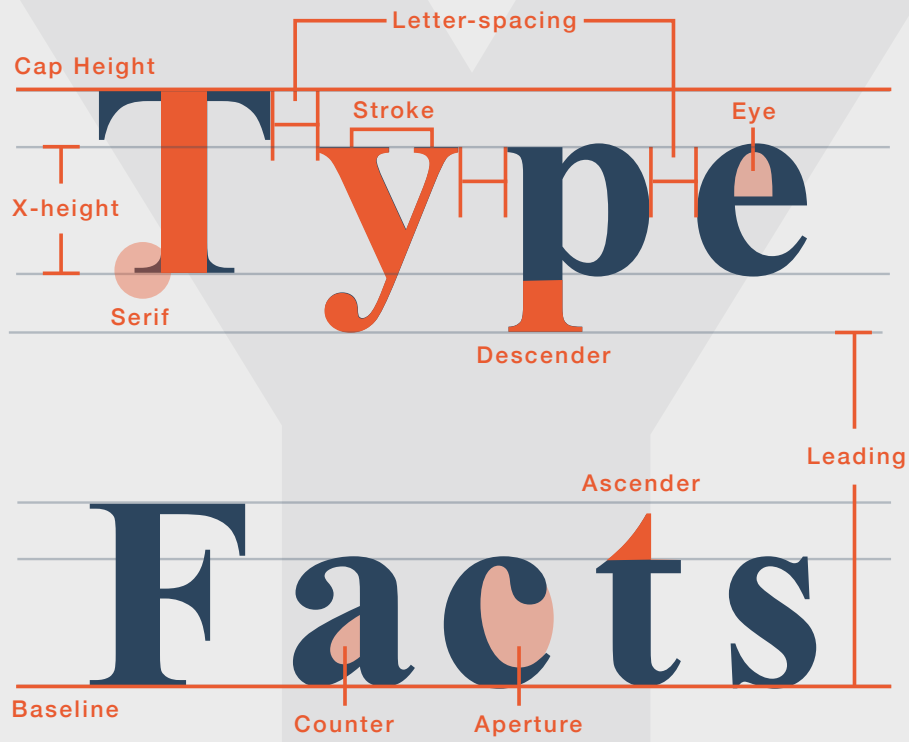
Center aligned text aligns to the center. For titles and emphasis.

Right aligned text aligns to the right. Used for secondary or caption text.

Poster 3 is an industry standard with no modifications. The tracking is 0pt and the leading in the body copy and examples is set to automatic based on font size.

Typography

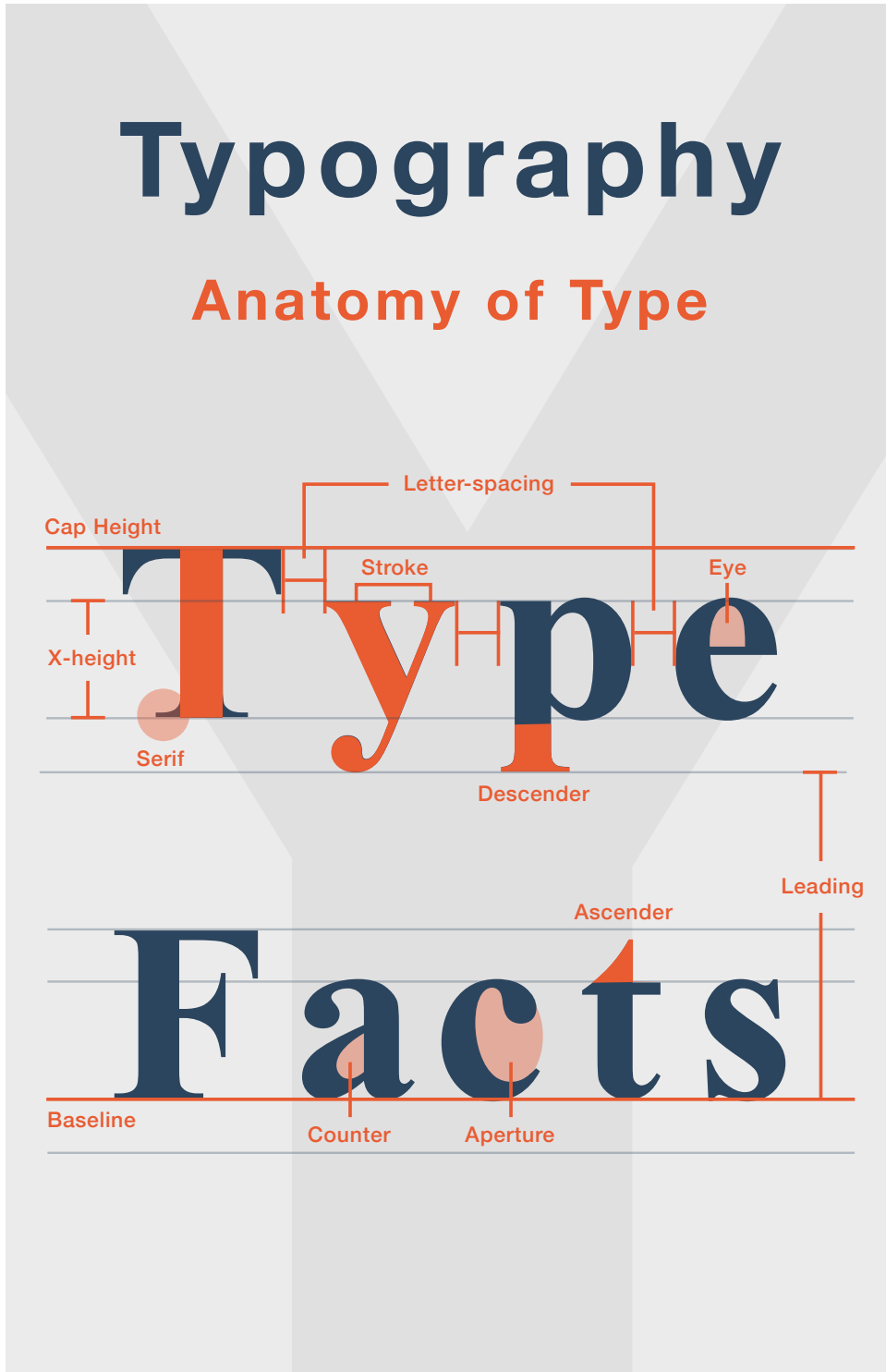
Anatomy of Type



Poster 4 representing high tracking and moderate leading. This poster has the same settings as poster 1 for tracking. Students would not reconstruct this poster.

Typography

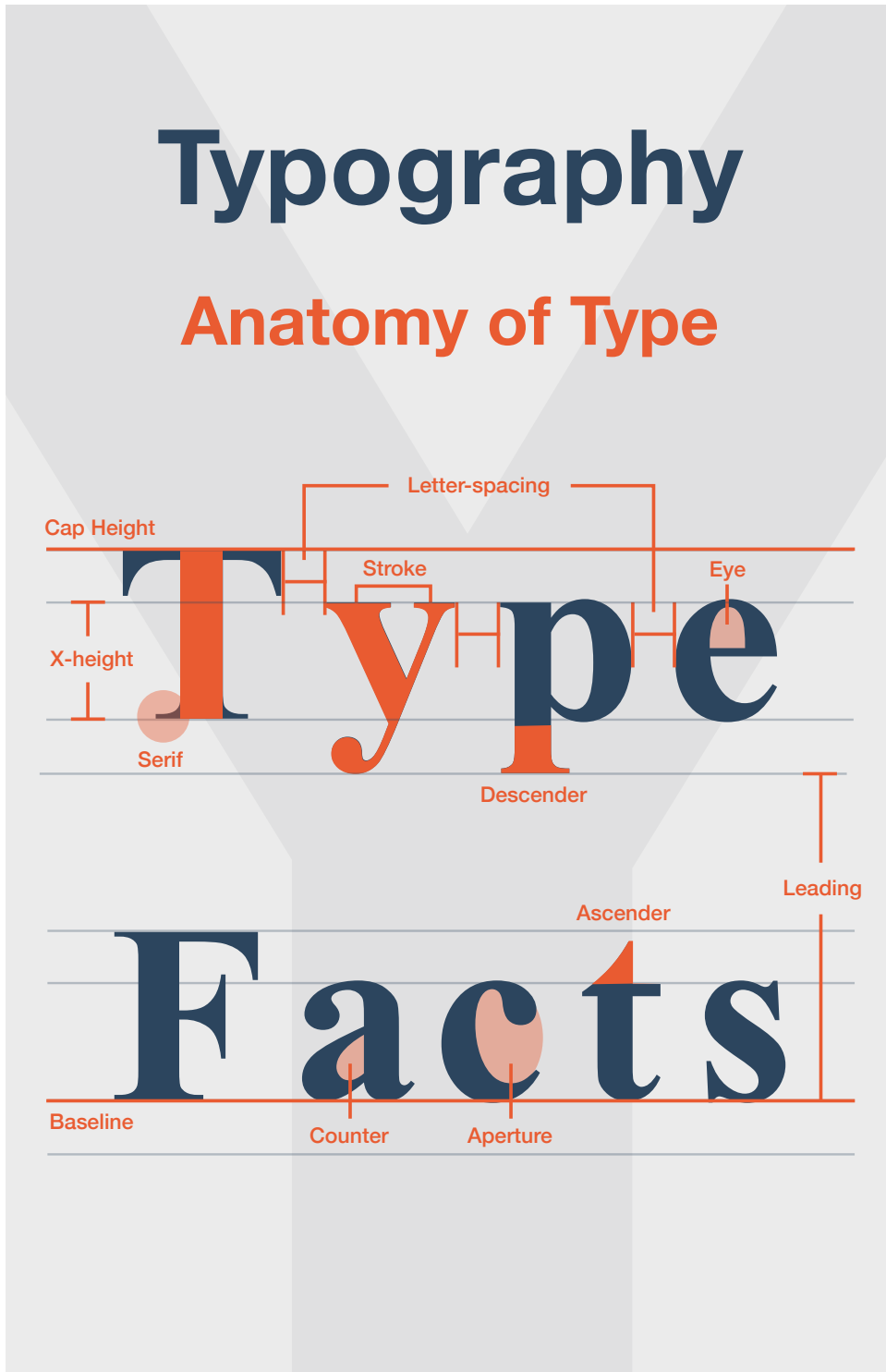
Anatomy of Type



Poster 5 representing high tracking and moderate leading. This poster has the same settings as poster 2 for tracking. Students would not reconstruct this poster.

Typography

Anatomy of Type



Poster 6 representing high tracking and moderate leading. This poster has the same settings as poster 3 for tracking. Students would not reconstruct this poster.

Typography

An Educational
Tool Guide

Type Definitions

Type Anatomy

Type Alignment

Type Families

Type Styles

Type Alignment

Q search

Left Alignment

This is an example of how text appears when it is left aligned. This is the standard format when using large bodies of written text.

Center Alignment

This is an example of how text appears when it is centered. This format is great for emphasizing text or headers and subtitles.

Right Alignment

This is an example of how text appears when it is right aligned. This format is great call out text or information that is a caption.

Justification

This is an example of how text appears when it is justified. This aligns text to the left and right and identifies columns easily and quickly in content such as

Type Anatomy

Q search

Serif

A stroke or line that extend beyond the characters form. This can be seen in the image above.

Stroke

An element that makes up the character or type form.

Kerning

The space between two characters or two letters.

Typography Definitions

Q search

A

Absolute Measurements

Measurements that have fixed values and expressed with finite terms in measurement.

Anchor Point

Anchors content to a specific point in written text so that the content moves as the text is modified.

Anti aliasing

The process of reducing the pixelation of images by providing a smoothing appearance over pixelated or jagged areas.

Appropriation

Borrowing of material from a specific epoch, style or movement and using the material as part of a different era or movement.

Asymmetrical

Material that provides balance but is not symmetrical, meaning the content is not balanced identically on both sides of the page and may align to the left, right, top, bottom, or other portions of the document.

B

Black Letter

The Black Letter typeface is ornate in written form and found most often used during the Middle Ages. This typeface is also known in typography as block, gothic, Old English, black or broken.

Body Text

The body copy, also referred to as copy, is the main content of a document. This font is often 8 to 14 points in size.

This is a prototype app developed with InVision and only offers a preview of the material a full version would contain.

Type Styles

Q search

Type Styles

Classifying fonts or type based on styles such as Serif, Sans Serif, Script and Decorative. The below examples include samples of each type style but do not include all variations that exist.

Serif Styles

Serif type styles include: Old Style, Transitional, Neoclassical, Didone, Slab, Clarendon, and Glyphic.

Goudy Old Style

Times New Roman

Garamond Pro

Type Families

Q search

Type Family

The variations in weights and styles of one specific typeface.

Helvetica Neue

Helvetica Ultraight

Helvetica Ultraight Italic

Helvetica Thin

Helvetica Thin Italic

Helvetica Light

Helvetica Light Italic

Helvetica Regular

Helvetica Italic

VISUAL SOLUTION #2 – TYPOGRAPHY APP

The typography mobile app will serve as a secondary resource for students learning typography. Students will focus in the classroom and on assignments to understand and practice the use of typography; however, having a tool at their side to assist only benefits their academic efforts. The app will represent a dyslexic-accessible setup where students can search and review typography terms, design examples, and the detailed components of type anatomy. The app will be a useful tool for students as it will be a typography dictionary providing both written and visual representations.

The mobile application provides a secondary resource that breaks down all content for students learning typography. The mobile application is a study tool with active search fields built-in. The sample here is only a prototype and provides a sample of what the application can achieve; however, this prototype provides information about type anatomy with visual representations as well as written descriptions, type alignment samples, typography definitions, type styles, and samples, as well as type families and all of the font-weight variations. The application is also developed with the mindset of 1.5x leading and tracking to enhance readability for students with dyslexia and provide a highly readable resource for any individual.

In order to see a fully interactive variation, please watch the video at <https://youtu.be/3cN6uK7oJ5M>

Dyslexia

CHAPTER 5
CONCLUSION

IN CONCLUSION

MAIN POINTS

Throughout this project, the research, visual resources, and connections I have made will improve my ability to teach students with learning disabilities. In researching typography and dyslexia, I have gained understanding of different connections that will assist and improve my abilities to teach students with learning disabilities. Dyslexia is a neurological disorder that affects visual recognition and processing of written material. The many different types of dyslexia make it very difficult to determine which individual has what specific classification. However, I have discovered that the key is not in understanding how to teach the material to specific dyslexia classifications but rather in designing material that is easier for all audiences to read.

Research provided insight into selecting the best color options, page layout components, font types, tracking (spacing) of letters, as well as leading adjustment (space between lines). The final solutions represent the visual component of this research. The visual material is not only a tool to use to teach students at the college level; it also represents a new norm for graphic design standards. The visual representation incorporates a modification of letter spacing and line spacing, but these changes are not so extensive that they represent a departure from accepted industry standards. For example, incorporating a slightly more spaced-out type is ideal in the industry as it improves the overall quality and readability of the material for everyone.

Dyslexia involves the rearranging of words or letters by the brain, making content hard to read, but other visual impairments exist, and presenting material or printed design content in public with slightly modified text would not detract from the design, as my visuals illustrate, but would extend the

view-ability beyond graphic design college students to a much larger public audience. This is just one way to solve the problems that those with dyslexia encounter with current typographic standards and use. I am sure that there are further applications for this research, especially if a full graphic design curriculum were considered to further enhance student learning. The overall goal of this curriculum concept would be to develop content that is more standardized in the industry and more accessible overall for dyslexia, and even individuals with visual impairment. The goal will be to enhance all design components so elements are easier to understand in an educational setting as well as promote enhanced teaching strategies in all educational institutions.

FUTURE ASPECTS

Moving forward, I would like to continue research and actively develop focus groups to incorporate students with dyslexia and focus groups that incorporate non-dyslexic individuals. Other elements of research would include surveys, activities, and other forms of data collection. This research would enhance the specialized curriculum and further enhance educational approaches even beyond the current thesis material. The overall goal of continued research will be to promote design inclusivity by pushing the concept of updating the design standard into the public eye and modifying standards to enhance readability for everyone. These concepts would not change the design in general but change how the material is viewed.

WHAT I LEARNED

As a professor, I have learned new teaching strategies that I will be able to take back to the classroom to enhance the overall educational experience for students with dyslexia. The goal will be to promote new aspects of content relay and promote even more inclusivity in all learning challenges. As a professor, I will omit elements that make readability more complicated and use appropriate color choices and text arrangements.

APPENDIX

APPENDIX A

TYPOGRAPHY COURSE

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ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 2

PROJECT OVERVIEW

COURSE PROJECT

The goal will be to develop an in-person course curriculum designed for graphic design college students with learning disabilities (LDs). The layout of the course and structure of content will be simplified for ease of understanding with both lecture and hands-on exercises and projects. The goal is to develop a curriculum with the rigor of other colleges but on a level that individuals with different LDs, ranging from ADHD to Autism, can understand. This requires making sure that content provided each class is multimodal, focusing on combining the three elements, each class, of being visual, hands-on, and auditory-based, or spoken.

PHASE 1

Phase 1 will include a strategic breakdown of the course. Phase 1 starts with a syllabus that details all of the vital reference content about the course for students. The syllabus will contain all of the information including, but not limited to, contact information, office hours, communication components, course description, course purpose or objectives, learning goals and outcomes, any required textbooks, materials for the course, additional resources, course policies, and expectations, school-based policies for behavior, attendance, and other needed school rules, learning resources, and course schedule. The syllabus can often include the course rubric and any additional content about labs or classroom after hours policies.

The syllabus is critical for understanding an outline of what will be taught in the course. Once this is complete, the additional part of phase 1 will be planning all content for the classes. Such planning includes an outline of each day and what is required and expected from students. It will also include learning outcomes and student self-evaluation components.

Course content will be broken down into five projects that reference the above research topics. Students will be provided with lectures, developed in phase 1, and each lecture will provide content, examples, student-interaction components, and in-class hands-on exercises/homework before project assignments.

In short, phase 1 will represent the skeleton of the course and the rubric.

PHASE 2

In phase 2, I will begin working on the five projects that will need to be developed for the course. Phase 2 will include the development of project content and designing out an example of each project to give the LD students a reference piece. I will also look online to provide more variations to inspire the students. The LD students do not typically think as critically or strongly as non-LD students, and therefore it is always best to provide them reference pieces to begin their work; this helps with the multimodal learning aspect.

The next portion would be to represent how each project will be evaluated with the rubric.

Phase 2 will also provide time for the development of the self-evaluation quizzes better to understand each student's mindset on the learning process.

In short, phase 2 will represent the development of all content that is design related and provide document examples as well as self-designed examples. Content will also be written out per project and per lecture breaking down the steps learned for those classes. Hence, students have a visual reference for when they need to work on assignments outside of class and need a quick refresher on what was learned that day, as well as what tools are most effective. Each project will also denote the proper program to use.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 4

PHASE 2 SUMMARY

In phase 2 I have created the homework and project assignments. Due to time constraints with another week of student crisis moving 1D students all online with various anxiety disorders, the focus of the assignment has shifted just slightly. The content you find here is the development of the projects and homework assignments only. As I move into next week and work on the research paper, the goal will be to continue working and developing the course lectures. I will also be developing my own personal representations of what each project final should look like, outside of the examples provided in the projects below. At this point, I have developed the course syllabus, rubric, course schedule, all general information regarding student work and participation as well as the homework and projects listed below.

Moving into week 7 and 8, I will be developing the rest of the material to have all lectures and samples included in the final presentation. Together this will be compiled into a teacher handbook that is set up in order from the start to the end of the semester. The notebook will have added features that include references and notes regarding how each section will be taught, in case the book was ever passed on to another professor.

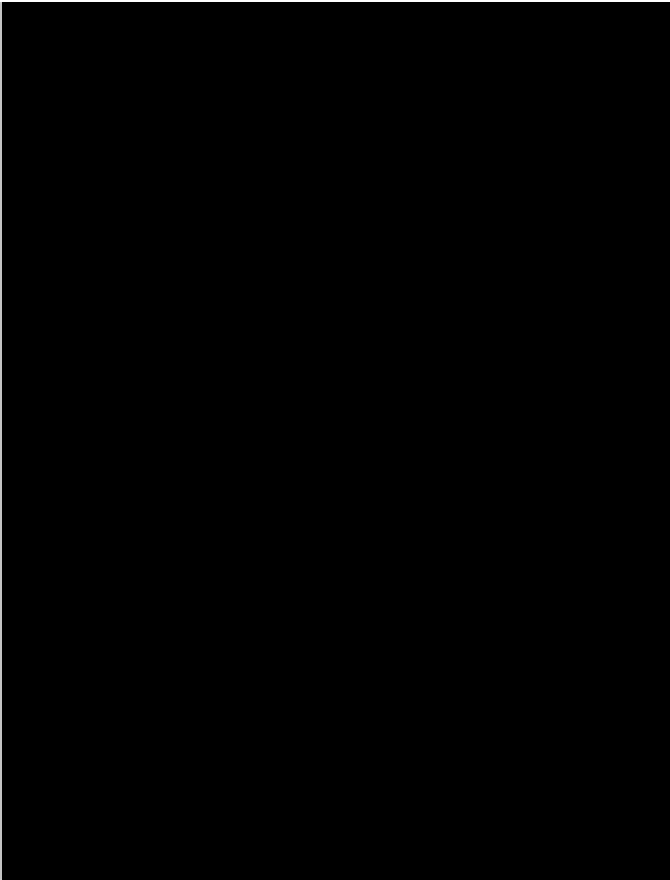
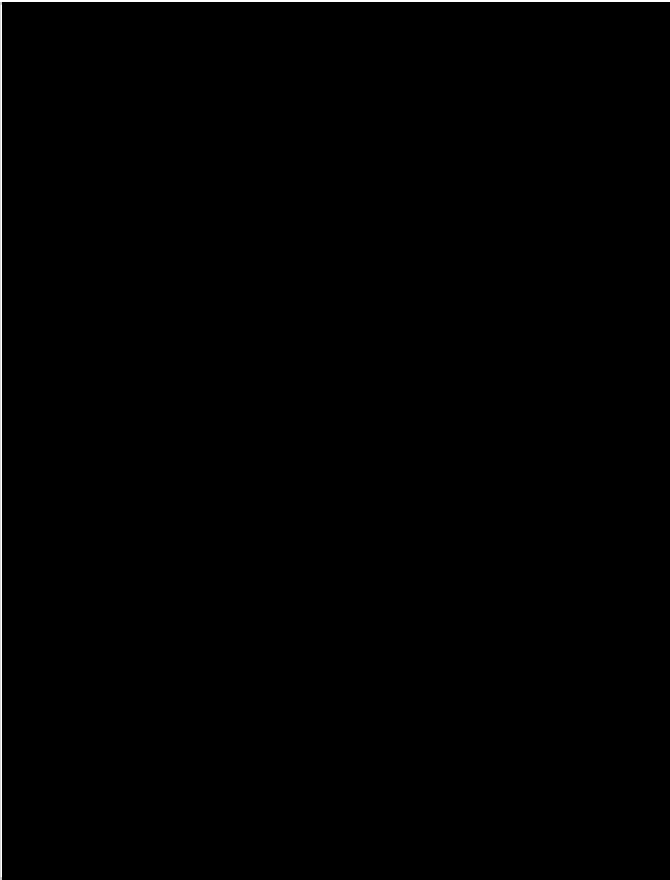
FINAL

The final project will be combined from phase 1 and phase 2 into a teacher portfolio. In the same idea of developing a process book, I will design out all content, including syllabus, lectures, handouts, projects, and so forth. All content will be designed in a uniform format using Adobe InDesign and in color. As with current courses, students are provided with color-based printouts for easy reference between classes. In short, I will provide color headers and other design elements to enhance the visual representation of each component. The teacher portfolio for this Typography course will include everything needed to get someone started in teaching, as well as the examples. All content developed will be organized and categorized based on the syllabus schedule.

FINAL SUMMARY

The course really allowed total focus on course development, however with the switch to everything online due to the outbreak of the coronavirus, the time that was originally allotted for the assignment was cut short due to my full-time teaching job taking students with learning disabilities, who have never had online school, into an online environment. In doing so, 50-60 hours of my work was allocated to work, leaving me working on assignments partially during the week and full-time during the weekend. In this situation, the focus on designing the shell of the curriculum became my main focus. Also, the development of a lecture sample became the only lecture development, leaving the rest to be something developed prior to course instruction. Finally, instead of developing final designs, due to time constraints, the focus was to find examples online that met the needs of the assignments to give students strong and varied examples of final solutions. In moving forward, my goal will be to design on concept for each.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 5



PLANNING PROCESS

SYLLABUS

Below is the mapping out and breakdown of content that would be valuable to be included in the course syllabus for the Typography class.

Typography	
Syllabus	- late assignments
- college name	- attendance/
- course name	- tardy policy
- spring 2020	- online possible
- instructor	- policies
- phone number	- VA attendance
- office #/location	- virtual attendance
- email	- TX homework
- class info (time)	- class withdrawal
- job	- field trips
- office hours	- course schedule
- required text and outline	
- supplies	- music
- additional sources	- classroom/lab
- domains	- policies
- course objectives	- professionalization
- graphic tools	
- project breakdown	
- grade %	
- rubric	
- academic policy	
- exams	

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 11

PLANNING PROCESS

COURSE SCHEDULE PLAN

Below is the mapping out and breakdown of course content. Content is placed left to right.

The handwritten course schedule plan is organized into four quadrants. The top-left quadrant lists weekly topics and assignments, with arrows indicating the flow of content. The top-right quadrant contains a list of course objectives or standards. The bottom-left quadrant details the course structure, including 'Week 1 Class', 'Week 2 Class', and 'Week 3 Class', with sub-points for 'Syllabus', 'Attendance', and 'Course Objectives'. The bottom-right quadrant lists 'Week 1 - Week 3 Class' and includes a list of 'Course Objectives' such as 'Design', 'Typography', and 'Professionalization'.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 12

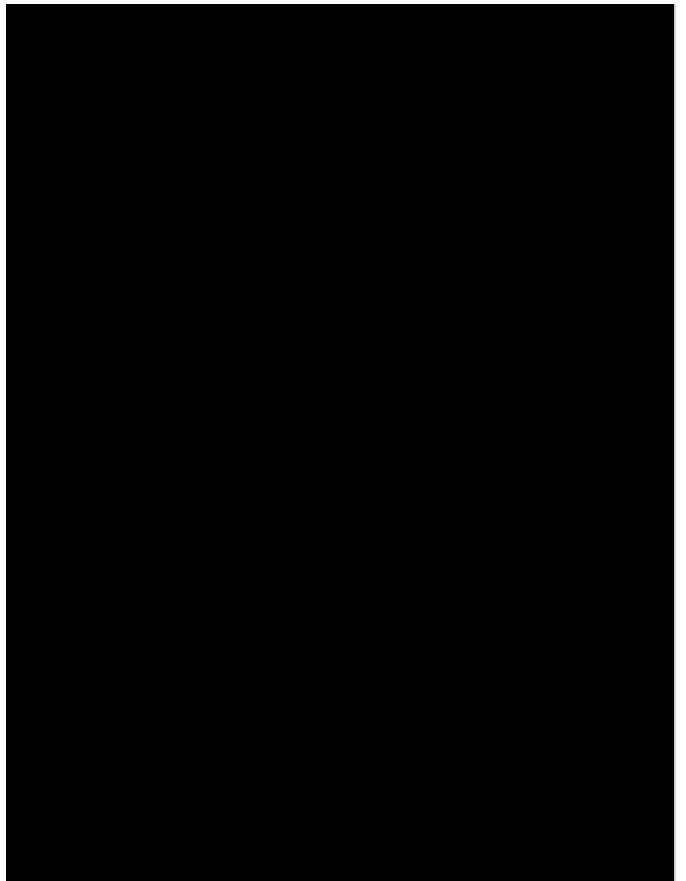
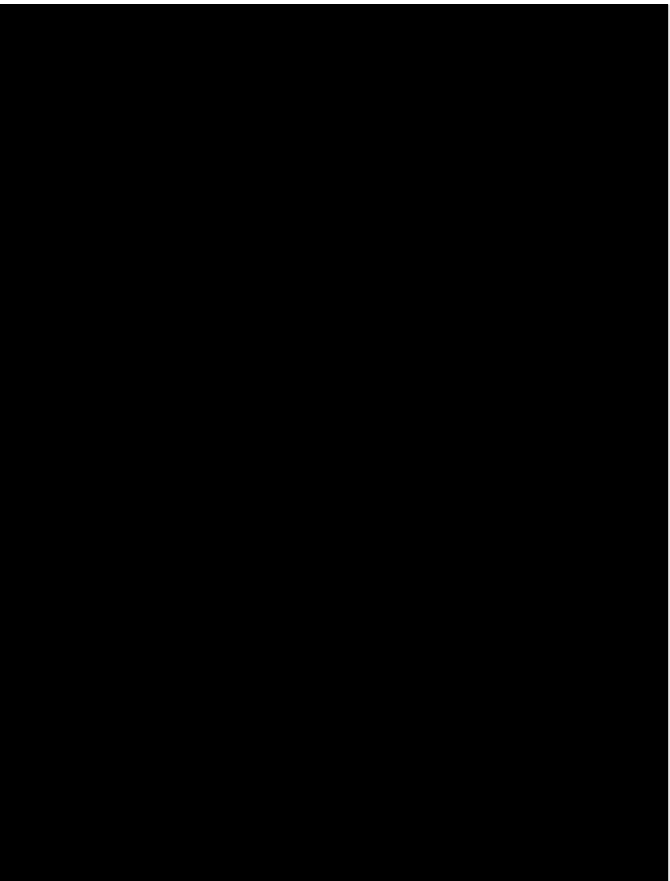
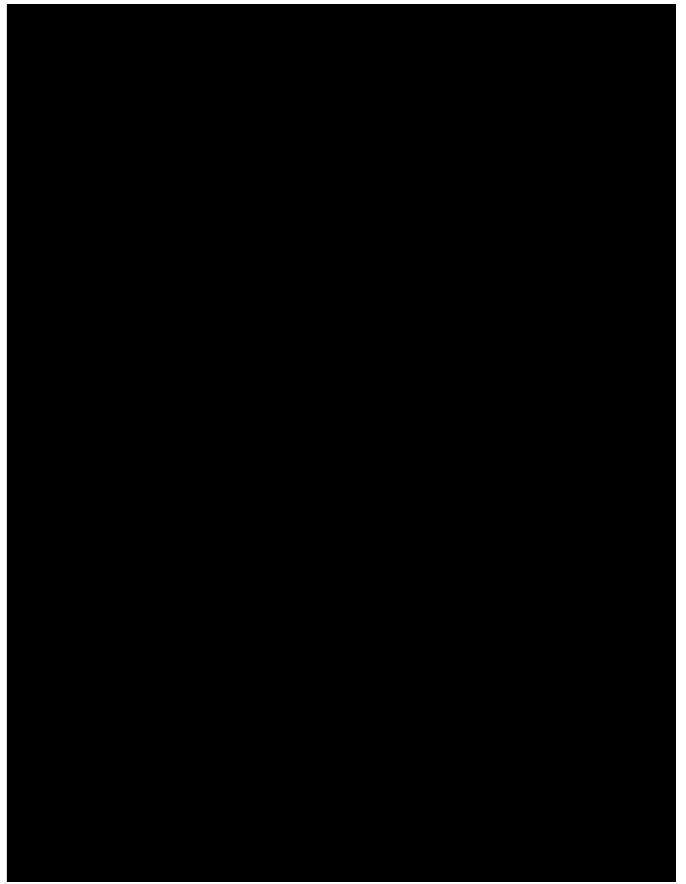
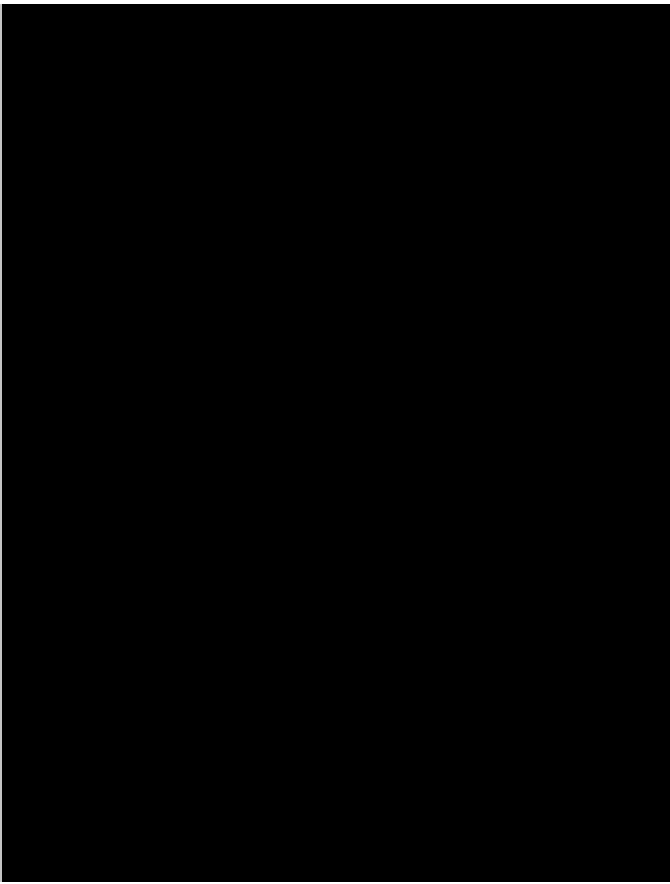
PLANNING PROCESS

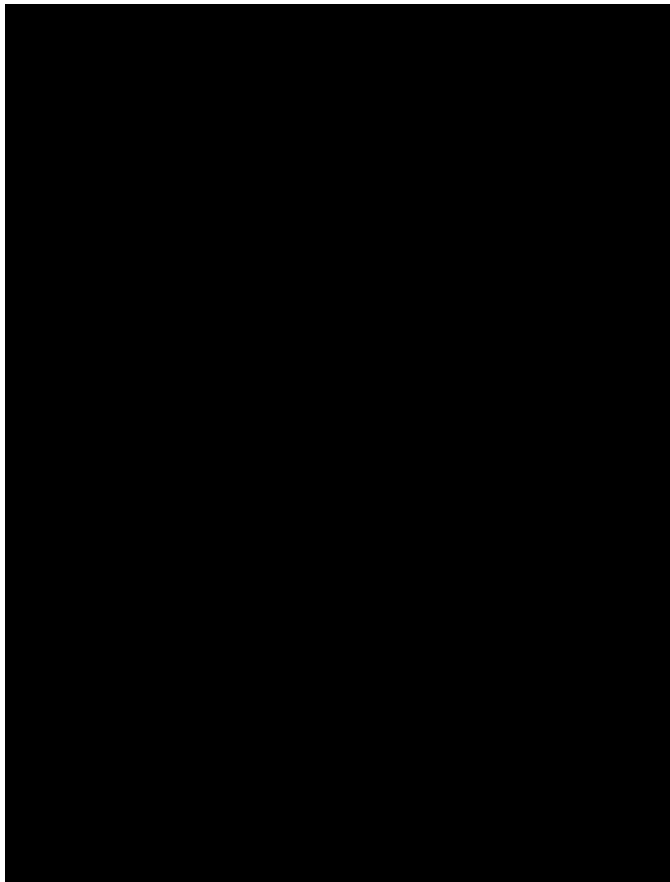
COURSE SCHEDULE PLAN

Below is the mapping out and breakdown of course content. Content is placed left to right.



ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 13





BEACON COLLEGE
INSTRUCTION TO TYPOGRAPHY
 DIG 3000
 SPRING 2021

Instructor Brittany Stozzo
Phone 352-787-0000
Office Office 11 - Building 109
Email bstozzo@beaconcollege.edu

Class Time Monday & Wednesday 9:00-10:15 a.m.
Open Lab See Posted Hours
Office Hours Tuesday & Thursday 12:00-1:30 p.m.
 Friday 10:00 a.m.-1:00 p.m.
 Other times available by appointment only.

REQUIRED TEXT & SUPPLIES

- No textbook will be required for this course. Handouts and other course materials will be available in both printed and digital formats. Digital files will be provided on the Mac Server.
- Students are required to purchase a jump drive or harddrive in order to backup all digital files from the class. Students will also be able to save files on a designated student folder located on the Mac Server. Students may also choose to backup files on their own cloud-based service.
- Materials for note-taking and note-organization are necessary to bring to each class.
- Laptops are not required but are strongly suggested for work outside of the lab.

COURSE REQUIREMENTS

- Adobe Creative Cloud account login is required to access all Adobe applications while in the Media Lab.
- Required prerequisite for this course: Visual Communications.

ARTS 924-ADVANCED TYPOGRAPHY | COURSE FINAL | 22

COURSE DESCRIPTION

Typography is the technique and even art form of arranging type in such a way that it represents the written language in legible, readable and arranged in various display methods. This introductory course introduces students to the use of typography in graphic design relationships. Typography is taught through the lens of history and is broken down into its anatomical structure. Students will learn how to use typography effectively and intentionally through layout and hierarchical arrangement.

LEARNING OUTCOMES

At the completion of this course, students will understand the fundamentals of Typography and be able to:

- Develop content with appropriate typography use and hierarchy.
- Use Adobe InDesign and Illustrator to effectively map out typography-based designs.
- Gain and understanding of how typography is used effectively in the environment and the world around them.
- Insert text and format text correctly with appropriate typeface pairing, size, kerning, track, scaling, and other similar typography elements.
- Save and export documents in various industry-standard formats.
- Practice an increased level of emotional intelligence and be able to also exhibit it. Measured through exercises and testing emotional reaction before instruction is given and after.

GRADING SCALE

A	93-100	C	73-76
A-	90-92	C-	70-72
B+	87-89	D+	67-69
B	83-86	D	63-66
B-	80-82	D-	60-62
C+	77-79	F	<60

ARTS 924-ADVANCED TYPOGRAPHY | COURSE FINAL | 23

FINAL GRADE PERCENTAGES

PROJECTS (70%)

Typography-based design projects (individual development) or hands-on assessments. **5 projects for this course (14% each).**

PROFESSIONALISM (20%)

Professionalism is determined on overall class participation, student attendance, course preparation and materials management, overall appearance when in class, behavioral considerations, and the practice of ethical decision-making.

HOMEWORK ASSIGNMENTS (10%)

Assignments provided for students to work in independently to gain hands-on practice outside of the classroom. This will test the students ability to retain information from the class as well as provide individualized thinking and learning strategies to improve design confidence.

DELIVERING ASSIGNMENTS

As in any design course, all content is comprehensive and each assignments builds off of the previous assignment or lecture-base content. Due to the fact that the course is comprehensive, late assignments, those assignments later than 2 class periods, will not be accepted. Students looking to redo projects must find time outside of class to redevelop content.

ARTS 924-ADVANCED TYPOGRAPHY | COURSE FINAL | 24

ACADEMIC INTEGRITY POLICIES

Plagiarism is defined by the American Heritage Dictionary of English Language as the use and passing of ideas and/or writings that are owned by another. When using sources, place information in quotation marks.

Cheating is defined by the American Heritage Dictionary of English Language as the taking of content from an exam/test or completing any assignment in a dishonest way. This includes improper access to other's design work or answers.

Fabrication is defined by the American Heritage Dictionary of English as the use of untruthful or false statements in any work submitted.

Students are responsible for the authorship of work they submit. Plagiarism, cheating and any type of fabrication are NOT acceptable on any terms and those students whose work provides evidence of any academic dishonesty are subject to the following sanctions.

Sanctions

- 1. First Offense** - Student will receive a written warning and work must be revised. There will be a grade reduction penalty for the revised work at the faculty member's discretion. All students committing a first offense will be required to complete an online plagiarism module that is available in the Writing Center. The Academic Integrity Assessment must be passed with a score of 80% or higher.
- 2. Second Offense** - Student will receive a zero for the work submitted.
- 3. Third Offense** - Student will receive a referral to the Department Chair. The Department Chair will decide the next course of action, which may include the student receiving a failing grade for the course and/or course withdrawal.

Academic Integrity Violation Responses

1. Any academic dishonest procedures and disciplines will be considered first and reviewed by the faculty member that is teaching the course.
2. The next step is for the Department Chair to review all allegations and the Department Chair's approval is needed for academic sanction.
3. If an academic sanction is needed, the student will be notified with his/her right to appeal to the Department Chair and, if there is no conclusion reached, then the sanction is passed on to the Vice President of Academic Affairs.
4. If the student chooses to appeal any allegation or academic sanction beyond that of the Department Chair, the case will go to the Vice President of Academic Affairs for a final verdict.

ARTS 504-ADVANCED TYPOGRAPHY | COURSE FINAL | 25

EXAMS

If take home exams are given to students, the exams must be submitted by the scheduled exam date. There is no exception for late submission of take home exams except for extreme extenuating circumstances. Any extreme circumstances must be approved by the Office of Academic Affairs.

LATE ASSIGNMENT POLICIES

Late assignments are accepted by the following circumstances:

- **Missed Assignment Deadline** - If the assignment is submitted by the class following the assigned deadline, students will be given a letter grade drop (10% penalty).
- **2 Class Periods Late** - If the assignment is submitted two class periods past the assigned deadline, students will be given two letter grade drops (20% penalty).
- **3 Class Periods Late** - Assignments will not be accepted and the student will receive a 0.

Example: The essay was due on the Monday class deadline, but submitted during the next scheduled class period on Wednesday. The student's grade will drop from an A to a B or a B to a C. If the essay is submitted two classes late the grade will drop from an A to a C. Three class periods late is an automatic F for the assignment.

The lateness policy will be adjusted accordingly for any emergencies/extenuating circumstances.

TITLE IX

Title IX provides a clear understanding of violence and harassment based upon sex and gender. These are Civil Rights offenses and subject to the same accountability standards as offenses against people due to race, national origin, etc. If you know someone, or if you are affected directly through harassment or assault, reach out to your appropriate Title IX coordinator and let them know immediately. All information is confidential and provided to keep you safe and protected. Contact info@beaconcollege.edu with your report or to get more information about Title IX.

RUBRIC CATEGORIES:

- **Critical Thinking** - Creativity, Problem Solving, Conceptualization
- **Applying Your Skills** - Design, Tool Use/Understanding, Production
- **Professionalism** - Class Participation, Ethical Decision-Making, Appearance, Behavior, Attendance, Project and Assignment Participation

ARTS 504-ADVANCED TYPOGRAPHY | COURSE FINAL | 26

ATTENDANCE POLICY

All students are always expected to be present and on time for all scheduled course times and days. Any work that needs to be made up due to tardies or absences is the responsibility of the student. All student are responsible for knowing and understanding the policies for making up any work as is outlined in the syllabus for each course.

- **1st & 2nd Absences:** Students will be informed of absences and a second absence will receive a written warning.
- **3rd Absence:** Interventions are taken into consideration for the third absence in an attempt to improve the student's overall attendance. Learning specialists will be notified and a final written warning will be sent to the student.
- **4th Absence:** The fourth absence will lead to a letter grade drop for the student's final grade.
- **5th Absence:** The fifth absence, based on the discretion of the faculty member and the Vice President of Academic Affairs, will lead to the student being withdrawn from the course.

Four tardies, where students are more than 10 minutes late to the class, will lead to an absence. Tardies are given at the discretion of the faculty member teaching the course.

VA ATTENDANCE POLICY

Any tardies or absences from part of any class will lead to an absence for the course. If the student receives four absences from any class during any month of the semester that student will be reviewed for termination from Veterans Benefits for unsatisfactory attendance.

FIELD TRIPS

There are no required field trips for this course. If a student needs to attend a field trip for another class, the instructor must inform of circumstances and time frames two days prior to the event. Missed field trips may require compensatory work. If a student misses class due to another field in another course, they are required to schedule time to makeup missing work.

ARTS 504-ADVANCED TYPOGRAPHY | COURSE FINAL | 27

COURSE SCHEDULE

The following assignments are always subject to change as various conditions in the class may dictate such changes. All changes are made at the discretion of the instructor. Class participation affects professionalism grade and is expected in all courses.

Class sessions include hands-on training, class projects, homework to reinforce learning and provide practice, makeup credit for missed assignments or projects, and other lecture and demonstration materials that are crucial for understanding and development.

January 18	Martin Luther King Jr. Holiday
January 20	• Syllabus • Introduction to Typography Presentation
January 25	• Typography History Part 1 Lecture • Homework: Create Your Own Cuneiform Writing (due January 27)
January 27	• Cuneiform homework due at the start of class (2.5%) • Typography History Part 2 Lecture
February 1	• Type Anatomy Lecture • Class Activity: KERNTYPE Game
February 3	• Foundations of Typography Lecture • Homework: Type Exercise (due February 8)
February 8	• Type Exercise homework due at the start of class (2.5%) • The Golden Rule of Typography, Type Terminology, and Letterforms Lecture • Homework: Type Terminology Review (due February 10)
February 10	• Type Terminology Review due at the start of class (2.5%) • Type in the Environment Lecture • Project 1: Create Type in the Environment (due February 17)
February 15	President's Day Holiday (Students work outside of class on assignment)

ARTS 504-ADVANCED TYPOGRAPHY | COURSE FINAL | 28

February 17	<ul style="list-style-type: none"> Project 1 due at the start of class (14%) Class Critique (participation grade) Typography Review with Class Typography Game Activity
February 22	<ul style="list-style-type: none"> Legibility and Readability Lecture Type as Emotion Lecture Project 2: Express Emotions with Typography (due March 8)
February 24	<ul style="list-style-type: none"> Project 2 Work Day
March 1	<ul style="list-style-type: none"> Project 2 Work Day
March 3	<ul style="list-style-type: none"> Project 2 Work Day
March 8	<ul style="list-style-type: none"> Project 2 due at the start of class (14%) Class Critique (participation grade) Type Use on the Web Lecture Homework: Find 3 examples of Effective Type Use Online (due March 10)
March 10	<ul style="list-style-type: none"> Type and Proper Type Use Lecture
March 15	Spring Break Holiday
March 17	Spring Break Holiday
March 22	<ul style="list-style-type: none"> Introduction to Typography Poster Project Project 3: Typography Poster (due March 31)
March 24	<ul style="list-style-type: none"> Project 3 Work Day
March 29	<ul style="list-style-type: none"> Project 3 Work Day
March 31	<ul style="list-style-type: none"> Project 3 due at the start of class (14%) Class Critique (participation grade) Type as Image Lecture Project 4: Type as Image Poster (due April 19)
April 5	<ul style="list-style-type: none"> Project 4 Work Day

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 29

April 7	<ul style="list-style-type: none"> Project 4 Work Day
April 12	<ul style="list-style-type: none"> Project 4 Work Day
April 14	<ul style="list-style-type: none"> Project 4 Work Day
April 19	<ul style="list-style-type: none"> Project 4 due at the start of class (14%) Class Critique (participation grade) Type Layout and Type on a Grid Lecture Homework: 3 Examples of Excellent Type Layout in Magazines (due April 21)
April 21	<ul style="list-style-type: none"> 3 Examples of Type Layout in Magazines due at the start of class (0.5%) Layout Design with Typography Lecture Project 5: Type and Layout Design (Magazine or Newspaper Page Design) (due May 5)
April 20	<ul style="list-style-type: none"> Project 5 Work Day
April 20	<ul style="list-style-type: none"> Project 5 Work Day
May 3	<ul style="list-style-type: none"> Project 5 Work Day
May 5	<ul style="list-style-type: none"> Project 5 due at the start of class (14%) Class Critique (participation grade)

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 30

RUBRIC

		A "Wow" Extraordinary	B "Good Quality" Well Done	C Complete	D "Ok" Acceptable	F "Unsatisfactory" Unsatisfactory
Critical Thinking	Concept	Insight of Relating Contexts	Interesting or Engaging Context	Ordinary Concept or Context	Stating or Offsetting	Weakness of Concepts
	Assignment	Understood the assignment and problem. Document a professional level of understanding.	Understood the assignment and outlined the project requirements.	Understood the assignment and completed the project requirements.	Understood the assignment partially. Missed to include at least 80% of project requirements.	Did not understand the assignment and was not able to satisfy the requirements.
Applying Your Skills	Layout	Elements are arranged creatively and the overall design is high impact.	Elements are well placed and produce and overall pleasing design.	Elements are placed in a way that the design is functional.	Elements are missing and positioned at random or somewhat positions.	Elements are missing making the design unattractive, unprofessional, or too easily understood.
	Type	Font choices add to the design and represent clear hierarchy. Clarity or clear type use.	Font choices are used to enhance the overall message.	Fonts are readable and adequate but need improvement.	Fonts are readable but poorly placed and type size and placement is inconsistent.	Fonts are not legible or readable. Poor choice of font size, spacing and placement.
	Color	Color helps reinforce concept and evokes an emotional response. Follow a color palette.	Colors help to expand the design and enhance the overall message.	Colors are used complementarily and consistently.	Colors clash and interfere with legibility and text. Lack of color consistency.	Color use is inconsistent to style and there is no color coordination or balance.
	Image Editing	Image manipulation is well executed and combined creatively and creatively.	Images are well edited with good technique used.	Image editing techniques are taught and used effectively.	Four image editing techniques, images are understood and clearly demonstrated.	Weak image manipulation images are missing or improperly manipulated.
	Tool Use	Tool use is highly creative and evidence of experimentation is evident.	Understands the tools and effectively uses them to an intermediate level.	Familiar with the tools available but struggles with software use.	Minimal understanding of the tools and requires repetitive assistance.	Unfamiliar with the tools and the software. Unable to work independently for complete tasks.
Ethics	Resources & Research	Excellent preparation for assignments. Shows understanding of the subject.	Effective preparation for assignments. Good understanding of the subject.	Basic preparation for assignments. Limited understanding of the subject.	Limited preparation for assignments. Shows consistent weakness with subject material.	No preparation for assignments. Little to no knowledge of the subject.
	Working Like a Pro	Use of ethical decision-making skills with display of strong professional business practices.	Ethical decision-making shows good judgment toward to high standards, technology use, and best business.	Qualitative decision-making shows good judgment toward to high standards, technology use, and best business.	Limited decision-making shows weak judgment toward to high standards, technology use, and best business.	Operational with no decision-making skills that represent professional business practices.
	Delivery	Assignments are complete, delivered as or upon deadline, and include neat, above and beyond.	Assignments are complete, accurately developed and delivered on time or before.	Delivered on time with minor missing elements. Usable.	Delivered incomplete and the projects usability is limited.	Incomplete and project is unusable.

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 31

CLASSROOM AND MEDIA LAB POLICIES

Rules of etiquette that must be practiced while working in the Media Lab:

- Treat others courteously with equal levels of respect and dignity.
- Students that are not actively enrolled in the class are not permitted in the classroom.
- Students are not to work on content that does not pertain to the course they are actively attending. Do not work on another classes assignment while another instructor teaches.
- All mobile devices, social media, games, and videos may be used for academic purposes, only when deemed necessary.
- Students are not allowed to install or remove hardware or software on any of the computers. Students are only permitted to backup files.
- Treat the equipment with respect and do not mistreat it (i.e., do not hit the computer, bang on the keyboard, etc.).
- If there is an issue with any computer you are using, do not fix it yourself. Let your instructor know or contact the IT Helpdesk.
- A black and white printer is available in the Media Lab for use and prints 8.5 x 11 inch sheets. Printing is permitted for school work and educational purposes only.
- If files are left by another student on the desktop, do not place in trash. Make sure you drag the files into the "Lost and Found" folder located on the desktop so students can retrieve them at a later time.
- Make sure you always back up your work on a jumpdrive and in your Student Storage folder located on the Mac Server.
- Never tamper with any Server files that belong to other students.
- The lab has an open seating policy. The instructor may see it fit to assign seats or reserve seating for specific students.
- Student's are never allowed to use the instructor's station or chair or search in any of the instructor cabinets unless otherwise instructed by the faculty member.
- Food is not permitted in the labs. Sealed drink containers containing water only are allowed and must be placed on the floor or back table.
- Always leave the workstations clean after each class. Do not leave your papers or any materials behind for other students to throw away.

ARTS 004-ADVANCED TYPOGRAPHY | COURSE FINAL | 32

Preparation & Responsibility

- Be prepared when you arrive to class. Bring needed items (i.e., books, files, tools, etc.)
- Save your work often and make sure you always backup content in two locations.
- Content must be delivered on time or before as late work is not accepted beyond two missed scheduled course days.
- Excuses are not accepted and are irrelevant. Do not make excuses for your behavior.

Behavior

- **Determination** - Do you stay committed to a presented challenge or problem until a resolution is reached?
- **Accountability** - Do you take responsibility for the actions you commit?
- **Self Control** - Are you able to remain calm and control your emotions during stressful situations?
- **Considerate** - Can you share the spotlight with other individuals in your class?
- **Open Minded** - Are you able to listen and appreciate other points of view?
- **Patience** - Are you patient? Are you able to wait your turn without feeling the urge of restlessness or feeling of being upset?
- **Detail-oriented** - Do you aim for overall accuracy and precision in the work you create?
- **Inquisitive** - Are you curious about things you don't understand?

Class Participation

- Remain positive and pay attention during course instruction.
- Participate in class discussions and share comments and observations.
- Do not ramble about content that is not relevant to the class.
- Do not dominate conversations and allows others a turn to speak and participate.
- Questions are always welcome but do not ask excessive questions. If you have a lot of questions, wait until after class or individual work time.

Appearance

- It is important to maintain a professional casual appearance. Please do not wear clothing that shows a lot of skin or clothing that contains inappropriate content. Make sure clothing covers the body effectively and also focus on wearing clean clothing.
- Refrain from wearing strong perfumes, as some are allergic to strong chemicals, and focus on proper hygiene.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 35

CUNEIFORM WRITING

HOMEWORK ASSIGNMENT
DUE JANUARY 27, START OF CLASS

OVERVIEW

Cuneiform is known as being one of the first ever recorded writing formats in existence. The cuneiform writing format, known as pictographs, is a form of writing with symbols to represent meanings or words. When the symbols are documented properly, they form letters and words so that concepts can be communicated, much like a coded message you have to decipher.

ASSIGNMENT INSTRUCTIONS

The goal of this homework is to understand how language and communication function when you don't have actual words. **Keep your answers in words or short sentences.** The assignment is graded based on completion and will count as a participation grade.

1. First, answer the following questions in English.

2. Next, use the Sumerian alphabet provided below to rewrite your answers in Sumerian cuneiform alphabet pictographs.



QUESTIONS

Answer the following four questions in English first then cuneiform. **Keep your answers short.** You are encouraged to use another sheet of paper, or the back of this one, to complete the assignment. **The assignment must be handwritten and cannot be completed on the computer.**

1. What is your name?
2. What is your favorite food?
3. What is your major?
4. What is your favorite hobby or activity?

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 35

TYPE EXERCISE

HOMEWORK ASSIGNMENT
DUE FEBRUARY 8, START OF CLASS

OVERVIEW

Using different fonts, write out the following sentence to see how different typefaces look side by side. The sentence to use is:

"Typography is great for graphic design."

ASSIGNMENT INSTRUCTIONS

1. Choose 10 different fonts and use Microsoft Word.
2. Double space lines at 14 pt font.
3. Make sure the sentences appear on a new line each time, with each new typeface.
4. Submit final files in a folder named Lastname-Web to the Mac Server.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 36

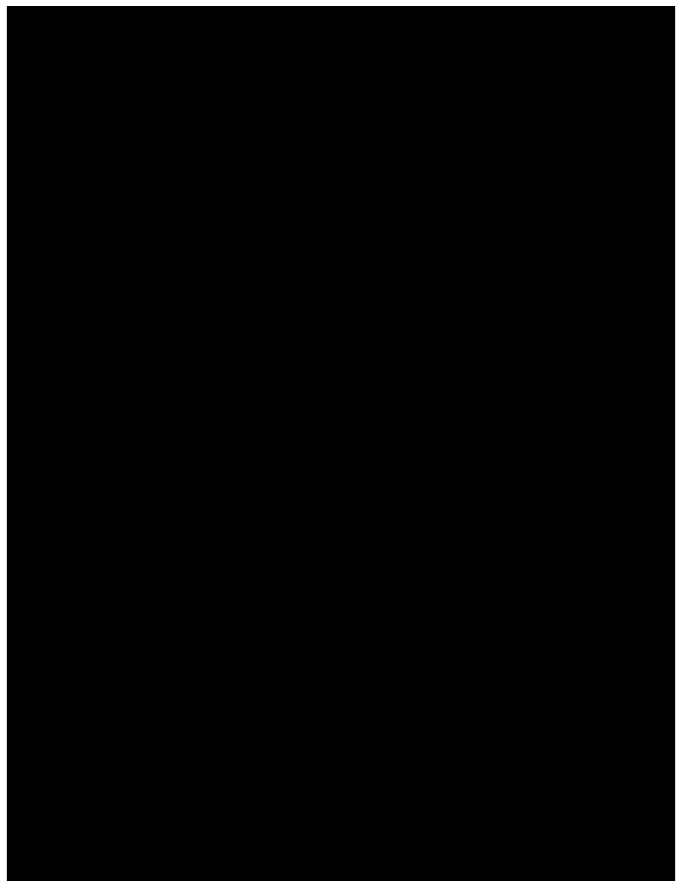
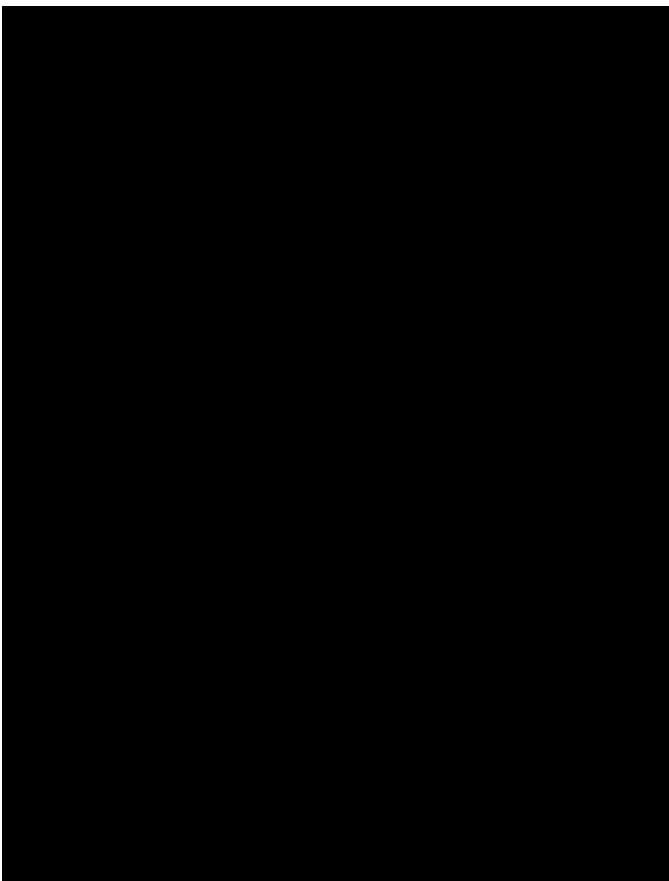
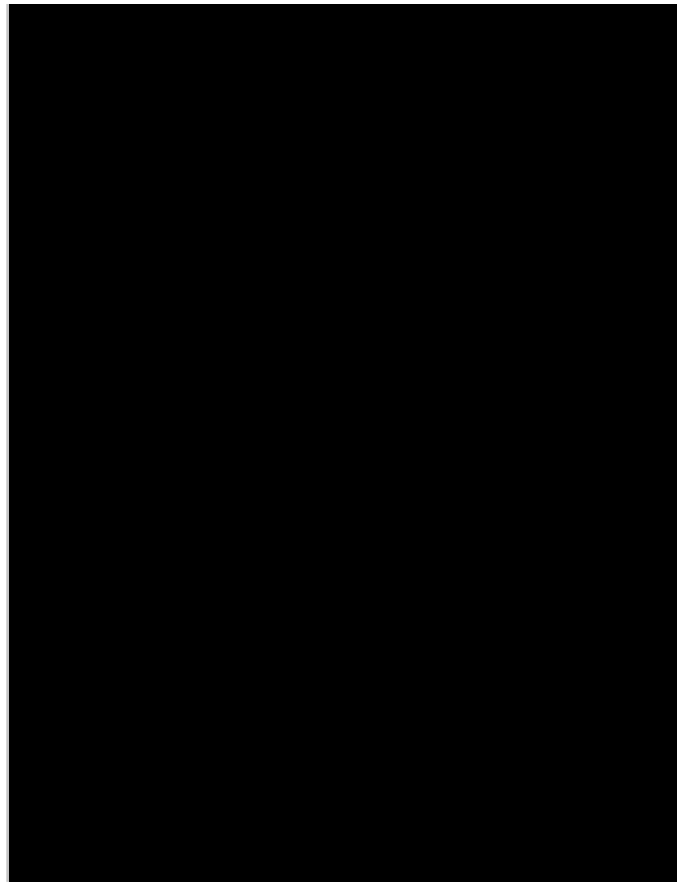
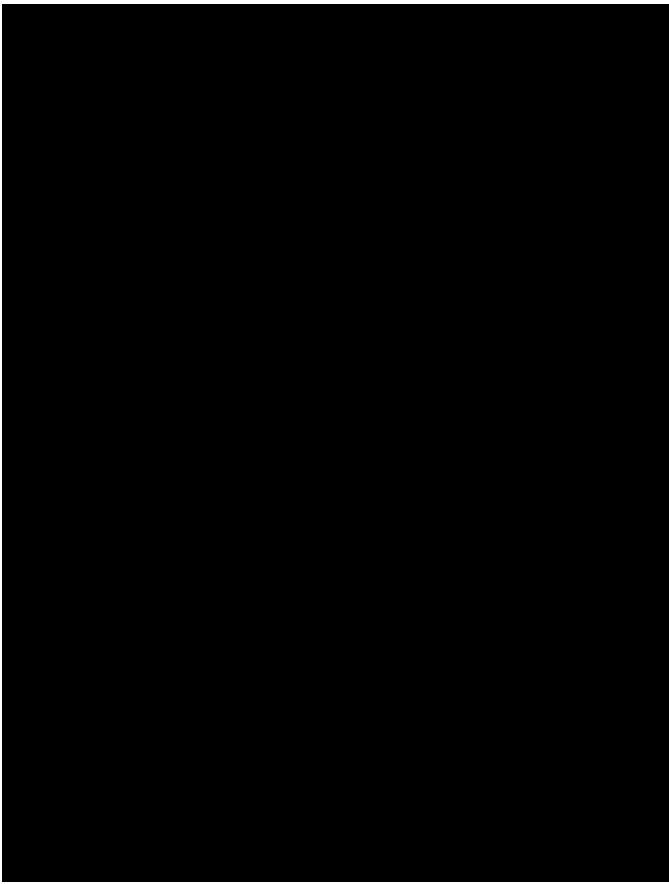
TYPE TERMINOLOGY REVIEW

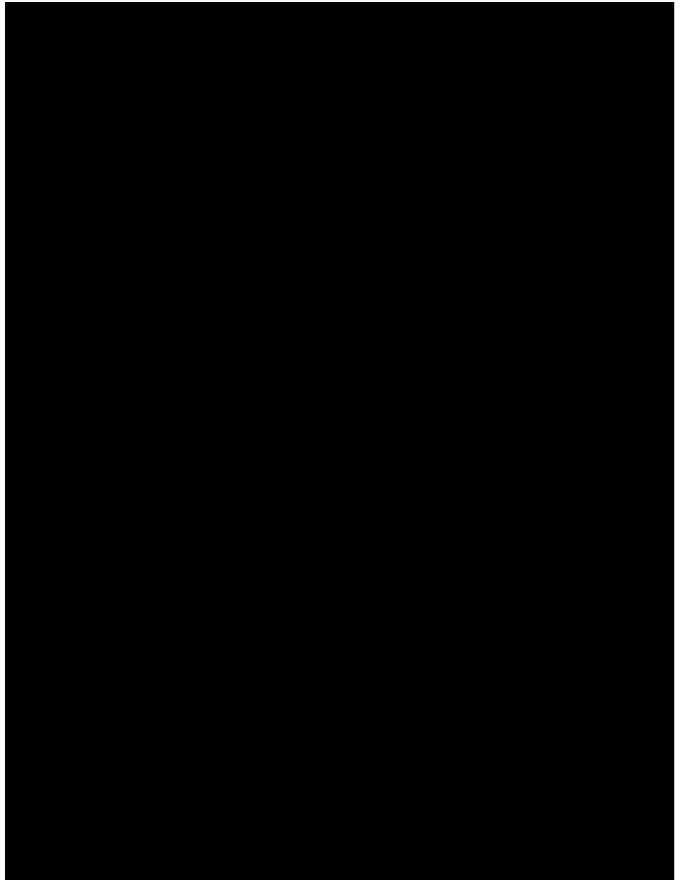
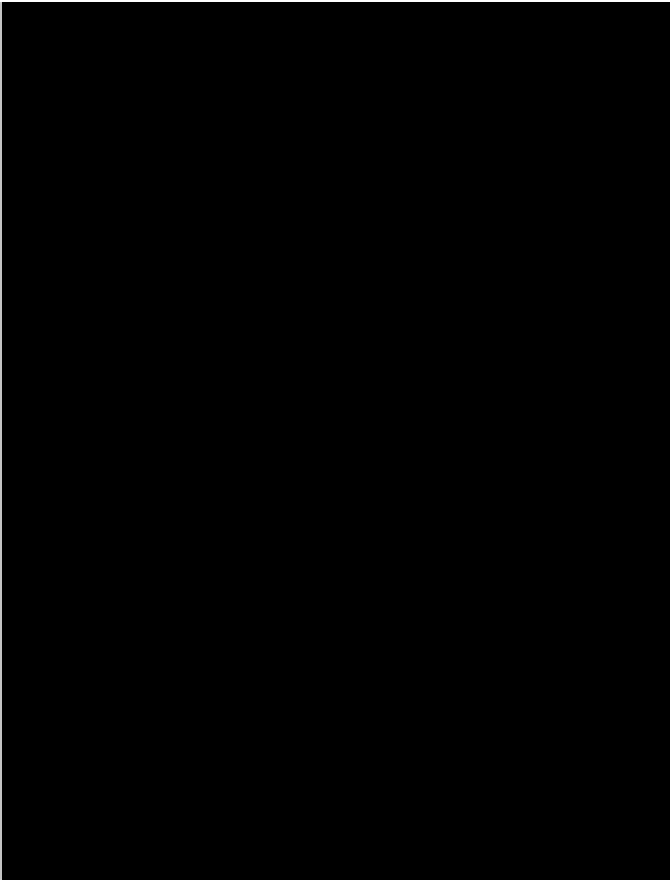
HOMEWORK ASSIGNMENT
DUE FEBRUARY 10, START OF CLASS

Match the following terms together to review everything we have learned so far in class. Please refer to the lecture to find the answers to the questions below.

- | | |
|----------------|------------------------------------------------------|
| 1. Stroke | A. Part of the letter that goes below the baseline. |
| 2. Ascender | B. Two letters, or more, joined together as one. |
| 3. Serif | C. Without line, or without serif. |
| 4. Stem | D. Any linear element. |
| 5. Descender | E. Part of the letter that rises above the x-height. |
| 6. Ligature | F. Slanted typeface. |
| 7. Sans-serif | G. A vertical stroke in a letter. |
| 8. Italic | H. A short line or stroke at the end of a letter. |
| 9. Baseline | I. Height line of lowercase letters. |
| 10. Cap-height | J. Space between letters. |
| 11. X-height | K. An imaginary line that the letters sit upon. |
| 12. Tracking | L. Space between lines of text. |
| 13. Kerning | M. Marks the top of uppercase letters. |
| 14. Leading | N. Space between characters. |

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 37





WEEK 1

- Syllabus Review**
 Breaks down all components of the syllabus and the importance of it to students. Aids in understanding of course requirements, grade standards, schedule, and other important academic aspects.
- Introduction to Typography Presentation**
 This lecture will provide the basic overview of typography to students. Since course materials is not taught during this class, the introduction presentation will provide an overview of type anatomy, hierarchy, grids, readability, legibility and other factors that summarize the meaning of typography in design.

BELMONT COLLEGE
INTRODUCTION TO TYPOGRAPHY
 ENG 200
 SPRING 2021

Instructor: Brittany Stinson
Phone: 202-751-4500
Office: Office 11 - Building 108
Email: bstinson@belmontcollege.edu

Class Time: Monday & Wednesday 9:00-10:15 a.m.

Open Lab: Open Planned Time

Office Hours: Tuesday & Thursday 10:00 a.m. and Other times are

REQUIRED TEXT & SUPPL.

- No textbook will be required, supplied via print and copy or
- Students are required to print from the class. Students will use Mac Service.
- Materials for note taking are
- Laptops are not required but

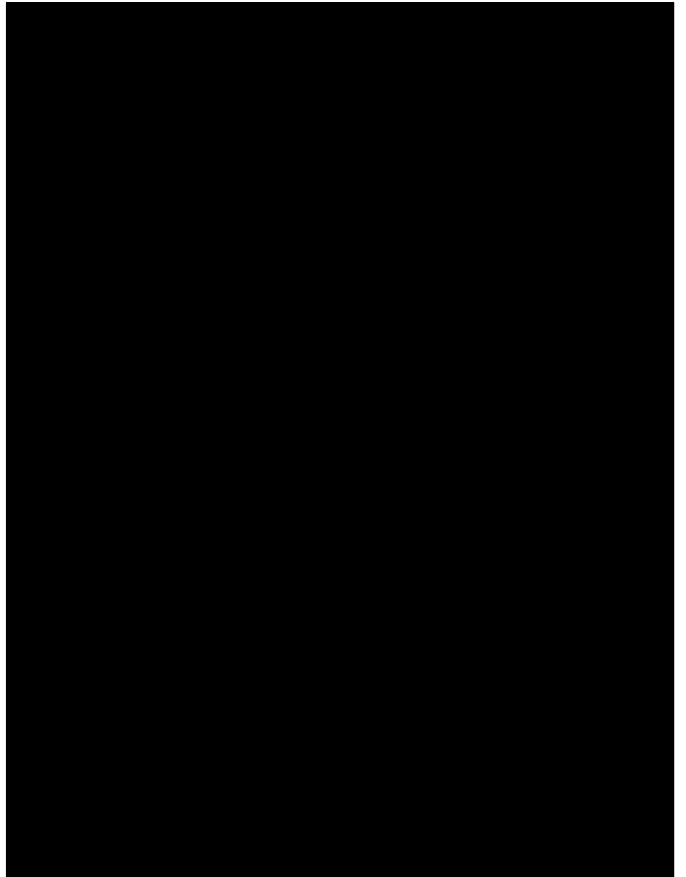
COURSE REQUIREMENTS

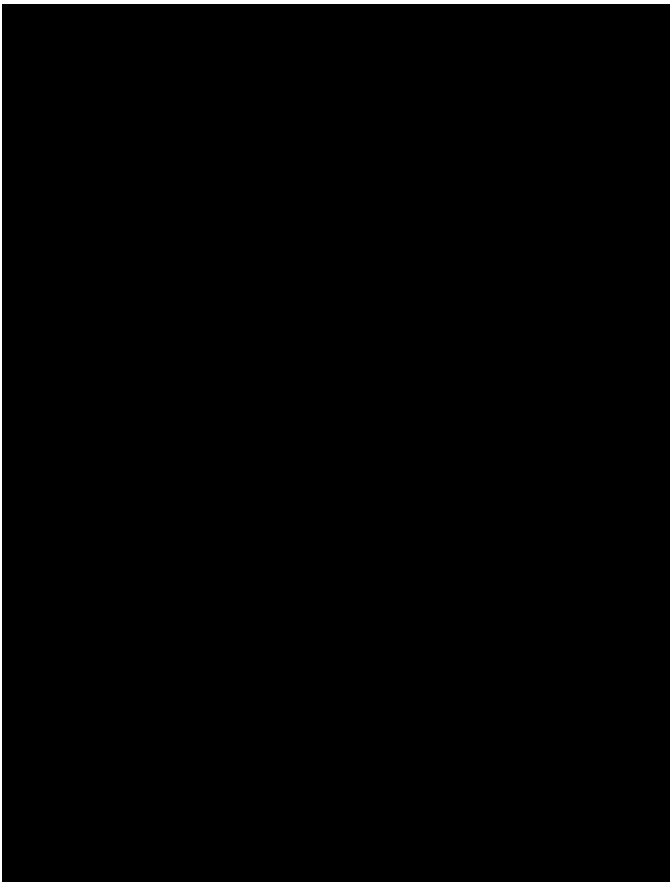
- Adobe Creative Cloud access. (Black Lab)
- No textbook will be required for this course. Digital handbooks and other class materials will be supplied via print and copy and on the Mac Service.
- Students are required to download a jump drive or harddrive in order to backup all digital files from the class. Students will also be able to save files on a designated student folder located on the Mac Service.

What is Typography

- Type is how an idea is written and given visual form.
- Letters, language and typography develop and change over time.
- How type is read, based on direction, is based on historical factors of how text was written.

ARTS 524-ADVANCED TYPOGRAPHY | COURSE FINAL | 47

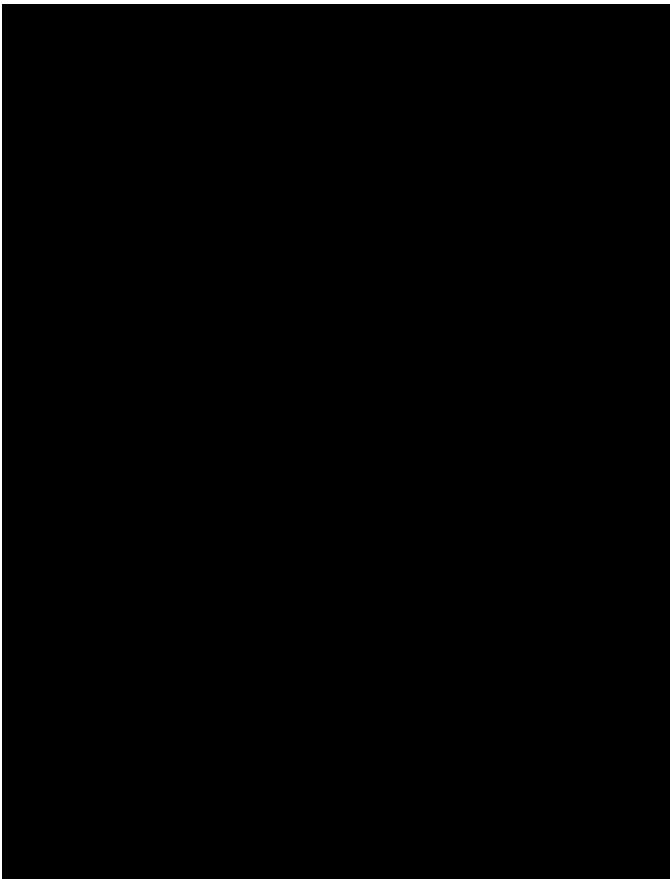




WEEK 4

- **Typography Review with Class Game Activity**
Matching card game developed from material in prior exercises and assignments that students will work together on to answer and solve in order to review material learned so far in the course.

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WEEK 6

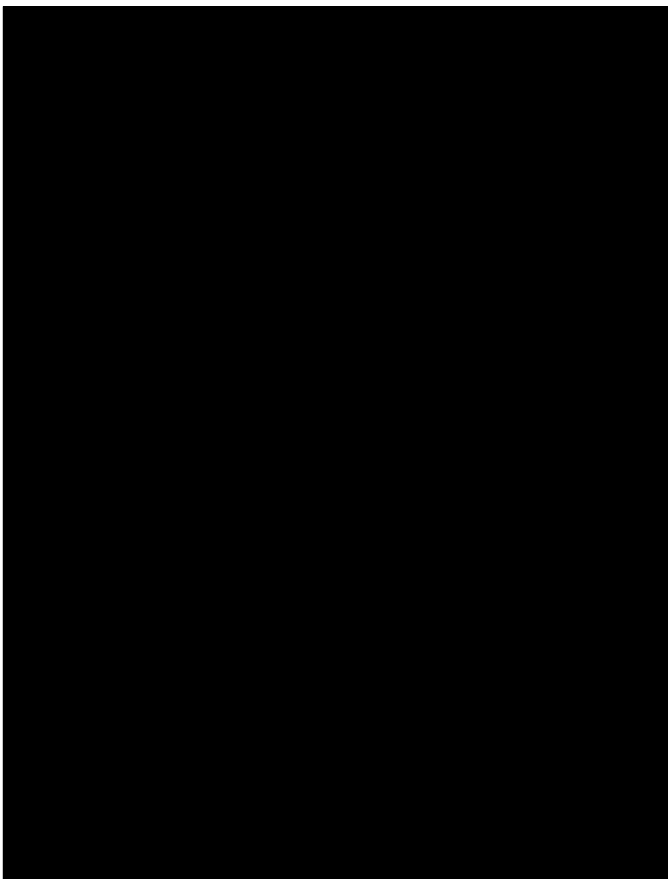
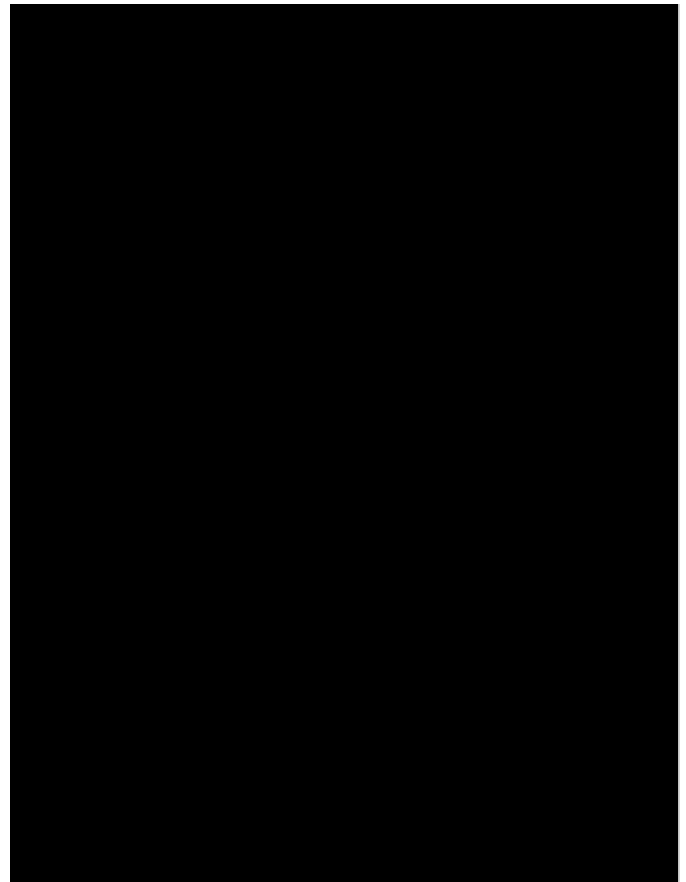
- **Project 2 Class Work Periods**

Students work in class on assignments so they are able to receive one-on-one feedback and critique as work is in progress.

WEEK 11-13

- **Project 4 Class Work Periods**

Students work in class on assignments so they are able to receive one-on-one feedback and critique as work is in progress.



WEEK 16

- **Project 5 Class Work Periods**

Students work in class on assignments so they are able to receive one-on-one feedback and critique as work is in progress.

- **Final and Makeup Projects Due**

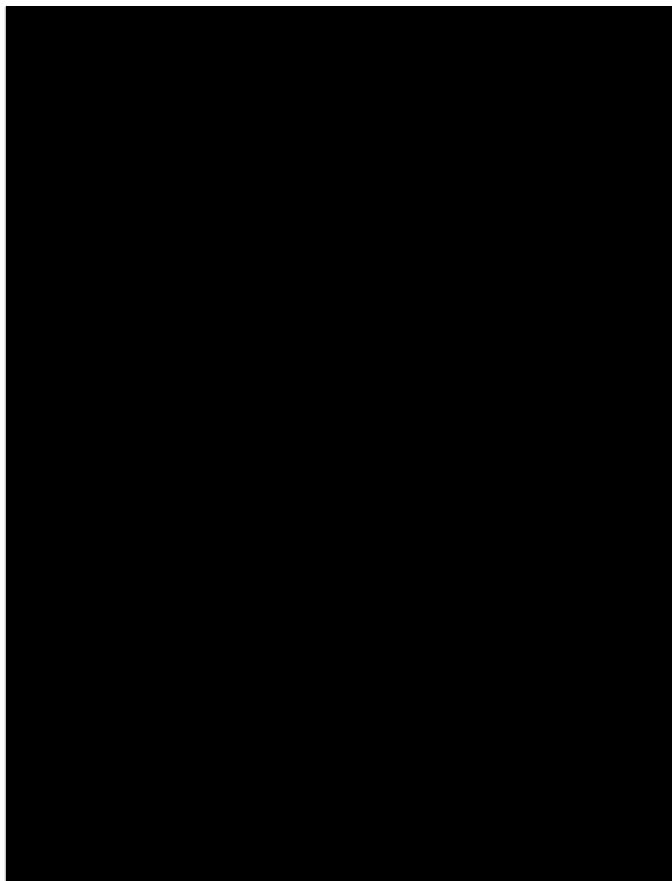
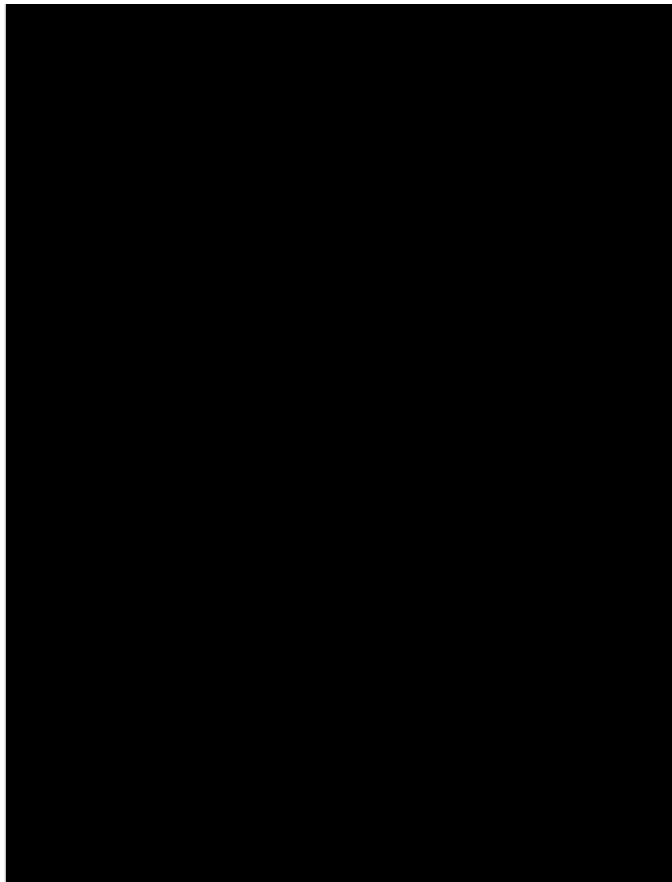


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APPENDIX B

GUIDE TO TEACHING INDESIGN TO STUDENTS WITH LEARNING DISABILITIES (EBOOK)



Chapter 1: Learning Disabilities	3
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Types of Learning Disabilities	7
Chapter 2: Notable People with Learning Disabilities	13
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01

INTRODUCTION TO LEARNING DISABILITIES

College is a time self-discovery and exploration for students, a time to grow and develop through the learning of new skills for professional development. College provides the platform for students to "experience new situations, meet new people, and establish new goals" (Dolber vi).

In today's society, more students with learning disabilities (LDs) are seeking the proper college to accommodate specific needs. Choosing the proper college to support an LD can be quite challenging, and then there is the issue of educators not being able to appropriately address the needs of LD students. In turn, this ebook provides a step-by-step approach on how to teach programs such as InDesign to college graphic design students with LD. Knowing the best approaches to teach the subject matter will provide the appropriate environment for LD students. It is essential to address the student's educational, social, cultural needs, as well as how the college of choice will help prepare and develop skills to be successful in a career.

Students with an LD may not fit into every ideal college scenario; however, these students still need to develop essentials from their education. Educational professionals will need to provide auditory, visual and hands-on interactive approaches to "help develop the total person, create cultural awareness, expand the student's range of interests, create more humanitarian values and attitudes, instill a greater sense of tolerance, develop respect for the rights of others, [and] expose [students] to community affairs and societal issues" (Dolber ix). LD students that can experience college learn how to prepare better academically, become motivated, learn new social skills, mature, as well as obtain independence for self-drive and discovery.

When knowing how to teach LD student's effectively, it is then able to help each student begin to succeed in small steps. The goal of understanding LD's is to understand how to identify the LD and modify course content accordingly per student. In knowing that there are so many LD's, it is then understandable that teachers must use three approaches to teaching: Auditory, visual, and tactile. These are the three different ways that students with LD learn.

THE THREE LEARNING TYPES

Auditory learners (AL) are individuals that learn best from hearing a speaker. AL students "learn and remember best by hearing and then repeating words silently to [themselves]. Hearing and speaking are critical to [college-level] learning" (Dolber 39-40). These individuals learn by carefully listening to all the information discussed in the classroom. AL's often sit closer to the lecturer and maintain eye contact or at least watch the lecturer so that they are not distracted by other students. AL students only use what is about aiding in their listening ability and do not focus on more than one notebook or writing utensil at a time. Those that

focus on auditory most may even ask questions for the teacher to reiterate statements or questions that relay repetition of content in different ways so that the student can better understand all aspects of the topic presented.

Visual learners (VL) focus on visual, which include "looking, seeing, and visualizing information" (Dolber 40). Individuals that learn visually focus on looking for "charts, notes on the blackboard, printed handouts, and other written information" (Dolber 40). VL students take notes in all classes, rewrite notes to better retain information through visual retention, write out lists of work to do, as well as write out homework and all assignment deadlines. VL's focus on all visual cues which relate to developing notecards for ease of studying and focus on all information written out and reviewed.

The last learning style is tactile learning (TL), also known as kinesthetic learning. These individuals "tend to understand [content] best when you are actively and physically involved in the learning of it. [Students can] learn by a hands-on method of experiencing or performing the activity to be learned" (Dolber 41). Regarding teaching, graphic design courses provide one of the best platforms for TL, because of lab- or studio-based courses. Having a better understanding allows students to finish activities or projects that involve interaction with materials or computer programs, enhancing creative thinking strategies as well as professional strategic thinking. TL's enjoy "handling materials [and] consider building models or giving demonstrations to the class, as opposed to handing in more traditional written reports or term projects" (Dolber 41). TL's focus best in small groups or classes, tend to jot down words or phrases in order to remember important facts later and enjoy reading materials that are action-based to keep the mind active.

UNDERSTANDING LEARNING DISABILITIES

"A learning disability is often called the hidden or invisible handicap. Unlike someone who walks with a cane or uses a hearing aid, a person with a learning disability gives no visible signs that he or she has a particular problem. Most people do not realize that [the] difficulty in processing information causes you to cope with many daily situations in a very different way than others" (Dolber 46). Students with LDs are often frustrated overall when dealing with societal pressure and pressures of learning in a college setting, which also deals with how they interact and react in daily lives and routines.

When it comes to students with an LD, "it is important that universities engage [the] students with disabilities" (Morita 1). Also, when teaching students with LDs, "faculty members play a crucial role in the inclusion of [students]" and aid in the ability for such students to develop a sense of self-worth (and to belong) (Morita 2). It is in this connection that faculty must focus on in order to aid the students in growing to be successful professionals, and here that the proper approach is present per class. The relations faculty provide the students to feel less vulnerable in social settings and aids in the students "develop[ing] a sense of belonging to the university in terms of connectedness" (Morita 2).

Students with LD need peer-to-peer interactions to develop social skills as well as active engagements, which provides auditory learning experiences. LD students learn on different levels so each class must provide auditory explanations, visuals, and active approaches where students can be hands-on, as well as having an open question and answer with each demonstration to provide the students with audible learning themselves. Mixing all their different styles of learning provides each student with the ability to quickly obtain the information and understand how it from different viewpoints. Presenting information this way focuses on "cognition, motivation and emotion" (Morita 2). Focusing on these factors also provides structure for each student because it is the faculty member role to make sure they practice, have confidence in decisions, and be able to understand what works, what does not, and why that is the case.

1

LEARNING DISABILITIES AND LEARNING DIFFICULTIES

LD students present teachers with a wide range of difficulties and strengths. Each learning difficulty can be the same, but each student will provide different approaches to solving the same problems and in turn, be stronger at some approaches than others. Processes that would typically seem mundane are a bit more complicated for students with LD. LD focuses on a "dysfunction in the areas of reading, spelling, writing, math, comprehension, memory, [and] attention [and]" (Dolber 47). Therefore, college professors and instructors must work harder to make sure students are getting the information presented in each class using the three different forms or teaching, which include auditory, visual, and tactile. For example, students may think logically and clearly but be unable to write [out] thoughts in a simple paragraph," or students may be alert and knowledgeable, but have difficulty following directions" (Dolber 47). Other issues that may arise revolve around the confusion of solving problems regardless of complexity or the inability to write content. Students may also have issues performing physical activities as efficiently as students without a non-physical LD.

Students with an LD may learn differently, but they still learn. Students that learn differently need extra time to address problems in order to be successful as they progress towards a professional future. Career choices and placement may be more difficult, but with hard work and the proper guidance, even LD students can feel more comfortable, with proper education, in obtaining a typical career path.

2

02 TYPES OF LEARNING DISABILITIES

It is crucial to understand more about LD, as different interactions in the college classroom will need to address accordingly. "LDs are neurologically-based process problems. These processing problems can interfere with learning necessary skills such as reading, writing, or math. They can also interfere with higher level skills such as organization, time planning, abstract reasoning, long or short-term memory, and attention. It is essential to realize that learning disabilities can affect an individual's life beyond academics and can impact relationships with family, friends, and the workplace." (Learning Disabilities Association of America). It is also essential to understand that "people with learning disabilities are of average or above average intelligence" and that "a learning disability cannot be cured or fixed; it is a lifelong challenge." (Learning Disabilities Association of America). This is why it is essential to teach students with LD appropriately so that they learn to cope and be able to work in the real world. Also, this ebook will provide the breakdown of such important factors and give examples of what happens when teachers succeed, and when students do not want to cooperate.

The types of LD diagnoses that will be addressed in this book include but are not limited to auditory processing disorder, Dyscalculia, Dysgraphia, Dyslexia, language processing disorder, non-verbal, visual perceptual or visual motor deficit, attention deficit disorder and attention deficit hyperactive disorder, Dyspraxia, executive functioning, memory, autism spectrum disorder and Asperger's Syndrome. These are not all of the LD that exists but are some of the higher documented cases found in education.

AUDITORY PROCESSING DISORDER (APD)

APD is a disorder, also referred to as Central Auditory Processing Disorder. This condition affects how sound that travels unimpeded through the ear is processed or interpreted by the brain" (Learning Disabilities Association of America). A person with APD may have issues recognizing subtle changes in sound; meaning they cannot interpret precisely where a sound is coming from, especially if they are in a location with a lot of background noise.

The signs and symptoms to look for in addressing if a student has APD include:

- Language-related task processing and recalling information difficulties.
- Misspelling and mispronunciation of words.
- Word dissociation.

3

- Difficulty explaining oneself.
- Slow processing of ideas or thoughts.
- Easily confused by the use of metaphors or similes (figurative language).
- Easily distracted by either background noise or other sounds.
- Misinterpretation of oral directions.
- May ignore others if they are occupied with an activity or thought.
- Issues staying focused.
- Difficulty comprehending and explaining ideas and thoughts.

For more detailed information about APD, please visit the Learning Disabilities Association of America (LDA) at <https://ldanet.org/types-of-learning-disabilities/auditory-processing-disorder/>

DYSCALCULIA

Dyscalculia affects how an individual understands numbers and typically affects the comprehension of mathematics. This LD leads to the struggle of keeping numbers organized properly, telling time, or counting.

The signs and symptoms to look for in addressing if a student has Dyscalculia include:

- Difficulty understanding quantities, place values, number lines, counting, issues with positive and negative values, as well as carrying and borrowing in number values.
- Difficulty identifying specific symbols and using the symbols correctly (i.e. + or -).
- Distinguishing left from right.
- Dyscalculia is often a frequent co-occurrence with Dyslexia and ADHD.
- Dyscalculia does not represent a lack of intelligence or lack of effort.
- Students with Dyscalculia learn better with diagrams, scratch paper to write down processes, peer-based assistance, use of colors to differentiate different problems and values, draw out images or write out words to better understand the value, and use of devices or rhythm. These students benefit most from the use of multi-sensory interactions, accommodations, and specially formulated assistive technology.

For more detailed information about Dyscalculia, please visit the LDA at <https://ldanet.org/types-of-learning-disabilities/dyscalculia/>

A fact sheet can be downloaded at <https://www.ashbrook.org/learning-disabilities/ld-fact-sheets/learning-disabilities/dyscalculia-fact-sheet>

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DYSGRAPHIA

Dysgraphia "affects a person's handwriting ability and fine motor skills" (Learning Disabilities Association of America). The leads to "legible handwriting, inconsistent spacing, poor spatial planning on paper, poor spelling, and difficulty composing writing as well as thinking and writing at the same time" (Learning Disabilities Association of America).

The signs and symptoms to look for in addressing if a student has Dysgraphia include:

- Legible handwriting via print or cursive.
- Inconsistency in writing styles, letter sizing, and word spacing.
- Strange positions are taken when writing by hand.
- Copying lectures, or writing in general, is slow and often challenging.
- Difficulty pre-visualizing page layout.
- Poor planning of space on a paper.
- Issues being creative and with thought processing.

For more detailed information about Dyscalculia, please visit the LDA at <https://ldanetwork.org/types-of-learning-disabilities/dyscalculia/>

DYSLEXIA

Dyslexia is a "language-based processing" disability where the individual cannot decipher letters appropriately, or they may appear backward or out of place. "The severity can differ in each but can affect reading fluency, decoding, reading comprehension, recall, writing, spelling, and sometimes speech" (Learning Disabilities Association of America).

The signs and symptoms to look for in addressing if a student has LD include:

- Delayed talking response.
- Slow learning of new words and phrases.
- Issues with correctly forming words.
- Difficulty remembering letters, numbers, or colors.
- Difficulty with memorization.
- Word mispronunciation.
- Spelling difficulty.

For more detailed information about Dyslexia, please visit the LDA at <https://www.ldanet.org/ldtypes/learning-disabilities/hyperpraxia.aspx?ID=2033353>

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LANGUAGE PROCESSING DISORDER (LPD)

LPD is an AFD where the individual has "difficulty attaching meaning to sound groups that form words, sentences and stories" (Learning Disabilities Association of America). AFD affects how the brain interprets sounds, however, LPD affects how the brain processes verbal language. LPD has been known to "affect expressive language or receptive language" (Learning Disabilities Association of America).

The signs and symptoms to look for in addressing if a student has LPD include:

- Difficulty interpreting meaning from any spoken languages.
- Issues in writing or expressing ideas or thoughts.
- Experience lower reading comprehension capabilities.
- Easily frustrated with the inability to vocalize thoughts. These individuals have a lot on their mind to communicate but have issues expressing such thoughts.
- Feel as if words are "right at the tip of [their] tongue" but can not vocally express. (Learning Disabilities Association of America).
- Difficulties in understanding common jokes or humor.
- Express thoughts best in drawn form when unable to find the correct words or phrases.
- May express symptoms of sadness or depression.

For more detailed information about LPD, please visit the LDA at <https://ldanetwork.org/types-of-learning-disabilities/language-processing-disorder/>

NON-VERBAL LEARNING DISABILITIES (NLD OR NVLD)

NLD affects verbal, motor, visual-spatial, and social-related skill sets. NLD individuals cannot adequately understand non-verbal cues (i.e., facial expressions, body language, and more).

The signs and symptoms to look for in addressing if a student has ALLNLD include:

- Difficulties in recognizing nonverbal cues (i.e., body language or facial expressions).
- Psycho-motor coordination is low, meaning the individual suffers from clumsiness.
- Difficulties with motor function skills such as writing, tying shoes, and using scissors.
- Issues in navigating instructions that have multiple steps to complete.
- Ask lots of questions, often showing repetition and inappropriate interruptions.
- Issues in making general connections in learned content from a course.
- Experiences the need to label each item in order to better "comprehend circumstances, spatial orientation, directional concepts, and coordination" (Learning Disabilities Association of America).

For more detailed information about non-verbal learning disabilities, please visit the LDA at <https://ldanetwork.org/types-of-learning-disabilities/non-verbal-learning-disabilities/>

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VISUAL PERCEPTUAL/VISUAL MOTOR DEFICIT

Visual Perceptual/Visual Motor Deficit is "a disorder that affects the understanding of information that a person sees, or the ability to draw or copy" (Learning Disabilities Association of America).

ATTENTION-DEFICIT DISORDER (ADD)

ADD is still a subcategory of ADHD, but ADD does not include the constant movement in which the ADHD, or attention deficit hyperactive disorder, individual experiences.

ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD)

ADHD is "a disorder that includes difficulty staying focused and paying attention, difficulty controlling behavior and hyperactivity" (Learning Disabilities Association of America).

DYSPRAXIA

Dyspraxia is due to the difficulty of individuals to control their muscles, leading to issues with movement, coordination, language, and speech; all of which can affect the individual's ability to learn. Dyspraxia has been known to exist in people with Dyslexia, Dyscalculia, or ADHD.

The signs and symptoms to look for in addressing if a student has ALLNLD include:

- ALLNLD include:
- Poor balance and clumsiness.
- Hand-eye coordination difficulties.
- Distressed from loud or constant noises.
- Difficulties with specific motor-based tasks.
- Inability to organize oneself or belongings.

For more detailed information about Dyspraxia, please visit the LDA at <https://ldanetwork.org/types-of-learning-disabilities/dyspraxia/>

EXECUTIVE FUNCTIONING

Executive Functioning is "inefficiency in the cognitive management systems of the brain that affects a variety of neuropsychological processes such as planning, organization, strategizing, paying attention to and remembering details, and managing time and space" (Learning Disabilities Association of America).

MEMORY

Memory is a deficiency in "working memory, short-term memory and long-term memory" when needing to process "verbal and non-verbal information" (Learning Disabilities Association of America).

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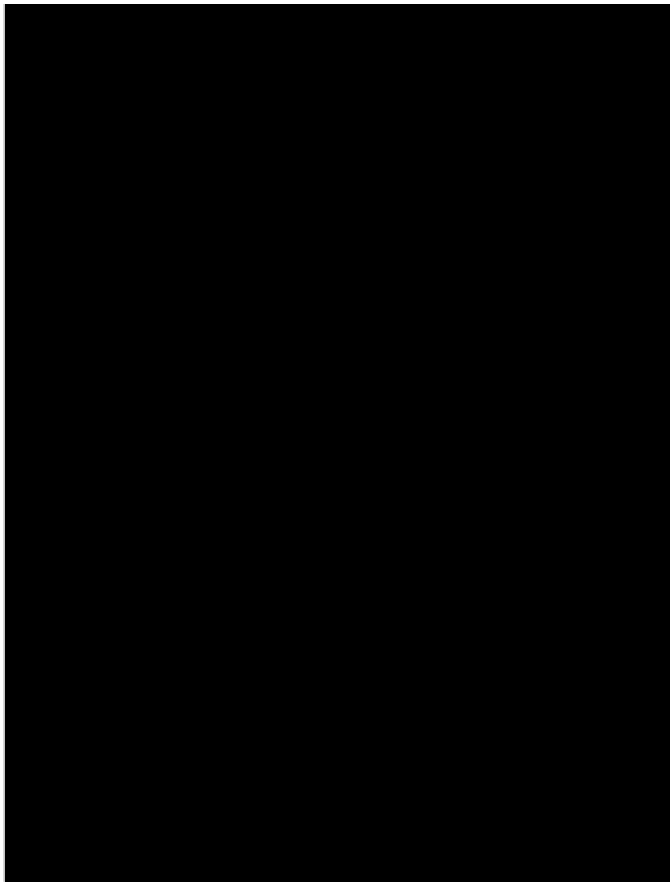
AUTISM SPECTRUM DISORDER (ASD)

ASD is a "developmental disorder that affects communication and behavior" (National Institute of Mental Health). These individuals have difficulty communicating or interacting with others, possess "restricted interests and repetitive behaviors," and the symptoms often "hurt the person's ability to function properly in school, work, and other areas of life" (National Institute of Mental Health).

ASPERGER'S SYNDROME

Asperger's Syndrome is a high-functioning form of the autism spectrum disorder. An individual with Asperger's Syndrome has a form of autism, but this is less severe.

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"IT HAS NEVER HELD ME BACK, AND SOME OF THE SMARTEST PEOPLE I KNOW ARE PEOPLE WHO HAVE LEARNING DISABILITIES."

Daniel Radcliffe, known for his role as Harry Potter, and role model and hero to generations of kids and adults, has recently spoken out about his struggle with dyspraxia. With dyspraxia, Radcliffe struggles with coordination of physical movement, and in turn, it is hard to plan types of movement patterns. "As a child, he had trouble with handwriting and tying his shoelaces" (Tucker).

Even though his condition is mild, his early years in school were difficult. Radcliffe wants to bring awareness to how people can still succeed with an LD. "Dyspraxia is not as well known as other learning disabilities and attention issues, such as dyslexia and ADHD," however, it is a standard LD and "often co-occurs with those issues" (Tucker). Daniel Radcliffe is among the six to ten percent of children today that show any types of dyspraxia symptoms. Dyspraxia is more common in boys than in girls.

Tommy Hilgner is a well-known fashion designer who has dyslexia. Hilgner stated, "I performed poorly in school...and was perceived as stupid because of my dyslexia. I still have trouble reading" (GreatSchools Staff).

He works to help people not be afraid to ask for help and raises awareness about various learning and mental health issues. "I just could not follow the texts. When I tried to read a book, it'd make it two pages into a chapter and start reading from the bottom up. My eyes would jump from one line to another. I would land in the middle of a page and start reading upwards. Sometimes I would start at the right side of the page and read backward—and I could not control it" (The Understood Team). Even when struggling to read, Hilgner was always able to identify clothing styles, brands, and all other fashion-based components. Often, like Hilgner addresses, students go undiagnosed and are afraid to reach out for help from anyone. His advice is for students not to be afraid to reach out to adults for assistance or to discuss problems being faced, and the teacher or adult, in turn, should help identify what is causing the defined struggle.

Watch Tommy Hilgner talk about his experience with his LD. <https://www.youtube.com/watch?v=3GfHdL1u>

SIR RICHARD BRANSON

"DYSLEXIA IS A KIND OF DISABILITY, BUT ACTUALLY IT'S AN OPPORTUNITY IF YOU TURN IT INTO SUCH."

Sir Richard Branson, the founder of Virgin Group, boasts about how dyslexia did not keep her down but rather got her to the career and success he has today. Being that dyslexia is an LD that leads to difficulty writing, reading, and learning, Sir Branson was forced to master delegation, a common trait that even intelligent individuals struggle to achieve.

Dyslexia was a growing point for Sir Branson as it forced him to speak clearly with customers, and therefore jargon about financial services was removed. Customers enjoyed the simplistic nature of his conversations and how they were without big and confusing statements. Such an understanding made him very transparent and allowed him to thrive with Virgin Atlantic. Sir Branson would refer to fancy jargon as terms not even himself understood so his view was to include what he could not understand and make explanations easy. This, in turn, explains why the Virgin Group company makes simplistic advertisements to communicate company messages.

"We have a test: if Richard can understand it, then anyone can understand it," Branson told the audience of Hedge Fund manager (Egan).

Michael Phelps was diagnosed at nine years old with ADHD. Even being diagnosed with an LD, he went on to win 28 medals, including 23 medals for Olympic gold, 18 Olympic gold medals in individual events, and 16 Olympic medals in individual events (Par). To become an Olympian, it requires hard work, extra focus, perseverance, practice, and dedication. These are all traits that individuals with ADHD do not easily possess.

Even with many teachers saying he would not be able to focus well enough to achieve a successful life, the faith of his mom and others pushed him to get through his studies and achieve the goals he has today. Through struggles with depression and anxiety, Phelps has taken his fame as an Olympic swimmer to become a speaker to benefit others with mental health issues and LD. "Michael serves as a living symbol of what you can achieve with hard work and persistence. In an interview, Michael commented, 'Your mind is the strongest medicine you can have... You can overcome anything if you think you can and you want to.'" (Par).

"I HAD A TEACHER TELL ME THAT I WOULD NEVER AMOUNT TO ANYTHING AND I WOULD NEVER BE SUCCESSFUL. SO IT WAS A CHALLENGE AND IT WAS A STRUGGLE, BUT FOR ME, IT WAS SOMETHING I'M THANKFUL HAPPENED. AND I'M THANKFUL THAT I AM HOW I AM. I LOOK AT MYSELF EVERY DAY AND I'M SO PROUD AND SO HAPPY OF WHO I AM AND WHO I'VE BEEN ABLE TO BECOME."

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THE CLASS EXPERIENCE FOR STUDENTS WITH LEARNING DIABILITIES

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When planning for class, regardless of the subject, professors prepare based on the idea that there are numerous students with different talents and majors that are taking the course. Some will need the course for their degree while others may not take it as seriously if they are taking it as a fun elective. In other words, it is essential for professors to create a curriculum that a diverse range, however when working with LD students, professors may have to alter content as the course progresses if the students do not understand the material or if repetition and practice are not working.

For example, when I first taught the web design course as an adjunct instructor, I was given the course curriculum and assignments prior. Teaching LD students helped me significantly understand the setup for the class and an approach that was previously present. I was given permission to update the content as needed and only made a few modifications. The class was split between learning HTML for the first eight weeks and CSS the last. The students hesitated a bit but by week eight had the HTML down. The next step was to present CSS to the class in an example where they followed along. Students understand why I was doing what I was doing but could not understand how and where the code went. Repetition did not work. I had to change the course content overnight by taking the code and writing in areas they needed to plug in code. It made them read the code and then they used a sheet with the answers to plug in code until it worked, sort of like a puzzle. I found this approach worked well, and students began understanding CSS and how it worked alongside HTML. It was a last-minute change that greatly benefited the class. Such a quick change of materials is an example of how each set of LD students is different, and adaptations need to be made to help them succeed and develop as professionals.

Crowded. Students can feel very crowded in the classroom if it is crucial to teach small classes where teachers can provide enough individualized attention to each student during class. It is crucial to work with all students, even the ones that seem quieter and more independent.

Busy. Rapid interactions and distractions are fundamental in classrooms. Some students with more outward LDs may provide distractions or interruptions that take the class off course. The teacher must know how to turn this into a conversation about the assignment, but sometimes these outbursts are due to confusion, or just the student does not understand. Also, some students will ask for more questions than others in order for them to better understand each aspect of the assignment, but this too can get disruptive. The busy environments with diverse LD students can provide numerous issues that arise with learning retention.

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Time-driven. Some students can get very overwhelmed with more substantial levels of work and deadlines. It is essential to provide a strategy for students to follow, as well as assistance for those that may feel all of their school work is piling up. Also, some students get very frustrated and flustered when they feel other students talk and do not let them finish or maybe hinder the ability for the student to focus and complete the assignment.

Public arenas for students. For students, classrooms are public arenas. The public spotlight can, at any moment, bare the child's feelings for that one's worthiness, making clear the official pecking order. Jose experiences the spotlight of public attention as shame, even though you have no such intent (Garrett). Students need time to be themselves and learn who they are but must also understand that the classroom is a place to share with others and learn new material for their professional career. There are students that provide serious interruption and even argue with the teacher on content, leaving others to feel unheard. While some students prefer not to speak, and it is vital that students are given the ability to provide feedback in the open forum as well.

Teacher talk. When a teacher speaks, it is important that students listen. In working with students with LDs, this can be a difficult task as some students but in, over talk, talk about other content, play on their phones, work on other assignments, and more. It is essential that students maintain focus and understand work and assignments. In order to engage the LD student is focusing on the approaches of interaction, lectures, and visual presentations are key make sure each student learns differently and has 3 different ways to show the information is key to not only keeping the attention but also helping everyone learn equally. Some are visual, some are auditory, while some do better with a hands-on activity.

Activity level. "The instructional focus is largely at the activity level, with teachers' expressing satisfaction when "things are going well," with students enjoying themselves. When the teacher's focus is on the activity flow, it is not evident that Jose is mentally on the fringes, not learning much of anything. He is terrific at engaging in an aspect of an activity that does not push his edges. Notably, Jose loves copying" (Garrett).

Monitor. It is essential also to monitor students as they work. Monitor the steps they take, make sure they are creating original work, make sure they are fulfilling the assignment instructions, and more. It is critical to monitor students with LD as they are not going to work as traditional students and may not yet be fully self-driven. Working one-on-one and driving activity and interaction aids students in mental growth and development leading to the ability to understand the importance of the work.

"Another barrier is the common belief that 'including' students with learning disabilities is fundamentally a matter of ensuring that the student 'fits in.' By and large, teachers in general education classrooms aim for their students with learning disabilities to be well accepted, for them to feel comfortable and to 'not stick out.' This translates into not wanting to treat them differently — a problematic predicament! To even begin approaching these students' learning needs requires treating them considerably differently" (Garrett).

"So, in fact, fairness, in the sense of sameness of instruction, or equity of instruction, or even in the sense of "each challenged to near capacity," is not very operative in classrooms, certainly not as much as we might like to think" (Garrett).

THERE IS A BETTER WAY TO TEACH STUDENTS WITH LEARNING DISABILITIES

In the past, "scientists believed that our brains were fixed — either at birth or by the time we were adolescents. This led to the schooling approach that now fills schools: identifying learning disabilities, providing accommodations, and working to students' strengths" (LaMar). This

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approach thought after a certain age all students would learn on the same level, but this was proven wrong "and that even students diagnosed with learning disabilities may develop the brain pathways they need, through careful teaching" (LilMar).

Overall, this proves that even students with LD's can change their way of thinking and develop new approaches with the proper teaching and learning environment.

TEACHING STRATEGIES

When approaching strategies to teach students with LD's, it is vital to understand the ones that exist because "learning disabilities are often inconsistent" and every individual's LD manifests differently (Asunuck Community College). Also, LD's are not in the same class as individuals with "mental retardation or emotional disorders" (Asunuck Community College). In short, teachers must understand various ways to approach the same LD and then learn how to address what works for each student in order to enhance that individual's ability to succeed in the material. Not all students can be taught at the same level, and every student in the same class will be at different learning levels and require different levels of one-on-one interaction.

There are various strategies and approaches to teaching students with LD's, and when teaching an entire class, all variables must be addressed, meaning there may be several ways that the same material is presented. This may seem repetitive, but some students will see the visual and understand that better than auditory and so forth. Some strategies to take into consideration include the following:

- Handouts (visual aids) for students to follow along with.
- Team collaboration
- Student interaction (i.e., asking questions during lectures, constant interaction, getting students, feedback, and more.)
- Break information down so that it is simple to understand. "State objectives, review the previous lesson, summarize periodically" (Asunuck Community College).
- Provide alternative approaches to the same materials.
- Allow time for students to work and get clarification.
- Provide time for projects, so students do not feel anxious, overwhelmed, or stressed about deadlines and neglected the assignment.
- Assist with all tasks (design, written work, proofreading, and more.)
- Give students instruction on using spell- and grammar-checks on all assignments.
- Always ask questions, sometimes, it is ok for teachers to not understand what the student is asking or not understanding themselves.
- Make sure students know they can be anonymous.
- Provide a support and trust system.
- Be patient and, if needed, provide step-by-step assistance.

These are just some of the many interactions that exist and included in this step-by-step booklet.

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THE CLASS EXPERIENCE FOR STUDENTS WITH LEARNING DISABILITIES 04

WHAT IS INDESIGN AND WHY IT IS USED?

What is InDesign? <https://helpx.adobe.com/indesign/learn-to-what-is-indesign.html>

Students always want to ask questions such as, "I know Adobe Illustrator, it does the same thing or I know Photoshop, and I can build layouts there. Yes, this is possible across all of Adobe's software programs; however, it is the efficiency in which InDesign can be used that makes it beneficial for publication and print design pieces (i.e., postcards, magazines, flyers, brochures). InDesign allows users to set up documents quickly with print ready features such as crop and bleed marks, margins, multiple pages, and more. The answer to the student's question, yes you can do the same thing, but when working with a multipage document, it does not lay them out in spreads or show you both sides easily without creating artboards.

It is essential to understand when InDesign should be used over the other Adobe programs and what its purpose is as a layout design component. Using Illustrator and Photoshop will enhance the work done in InDesign. InDesign holds the information whereas Photoshop provides photo edits, for example, and Illustrator provides scalable vector graphics.

InDesign is known as the leading industry standard for publication design. Why is vital here, and this is what must be reiterated to students. Students must be aware of all programs in order to understand InDesign, and at this point, reiterating is critical.

Photoshop is one of the most used design tools by graphic designers. Photoshop provides the ability to edit photography, or any photo in general, with various filters, masks, and providing the ability to combine rasterized images. Photoshop also provides color palette interaction and manipulations.

Illustrator is an image-editing program designed to create vector graphics, graphics that can be resized and maintain visual integrity at all size variations. In short, Illustrator provides scalable graphics that can be sized from 31 pixels to 10,000 pixels and still look the same. Illustrators provide the use of lines and anchor points.

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When used together, Illustrator, Photoshop, and InDesign form the Adobe Trinity for graphic designers. These are the three primary programs used by publication or production based designers. Photoshop edits the photos, Illustrator provides the vectors, and InDesign provides the layout structure that holds them all together. However, InDesign holds its own sets of tricks too. For example, InDesign does provide some light photo editing as well as the ability to create simple vector illustrations.

InDesign is used to create a graph, charts, shapes, and other similar graphics within InDesign without having to use links. Links are when files are placed into InDesign; it maintains the link to know where the file pathway is. When this link is broken, the file is isolated and no longer visible in InDesign. In short, packaging every file is key to making sure no links are broken, and file integrity is maintained. Not only with links, but InDesign provides the ability to combine text, images, and colors, or whichever combination, to create documents.

Also, InDesign is a great hub that provides the designer with the ability to focus on the use of typography. This software also provides spell check for pieces that will have substantial amounts of text. When working with students, it is essential they are aware of these features as those with spelling difficulties can take advantage of spell check to make sure their work is as error-free as possible. InDesign provides the hub to place content on a page and can creatively think through layout and place content strategically so that it flows.

INDESIGN'S BASIC TOOLS

There are many tools in InDesign that are very useful when creating intricate work; however, it is vital to focus only on the essential tools when first introducing InDesign to LD students. Too much information too fast can lead to self-esteem issues, doubt, hesitation to learn, confusion, and much more. Understanding the very basics and reiterating use of the basics provides a secure and easily understood foundation for LD students to build.

Here are the basic InDesign tools in use: <https://www.youtube.com/watch?v=Am7fj0-dW0>

The Essential InDesign tools that must first be taught and understood include:

1. **Selection Tools** - this the go-to tool in InDesign to select an object, or if you hold down shift objects. It allows the user to grab objects and text as well as resize image frames and shapes. Two types of selection tools exist in InDesign, the selection tool, and the direct selection tool. The selection tool grabs the entire object, but the direct selection tool allows the designer to grab points and drag them to resize specific parts of the given frame. When the direct selection tool is highlighted small squares form around the selected frame.

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4. Type Tool - The Type Tool (T) is how you will place frames to contain text. This provides the basic framework for how the design will look when text is placed throughout the layout. Also, when the Type Tool is selected on the toolbar, the user can click inside any frame on the page, and that then becomes a new text box. Users can choose the type on path tool, and the text will follow the outline of that shape.

Other features that are available with the Type Tool include various Character Formatting Controls such as Font, Leading, Kerning, Tracking, Font Size, Alignment, Hyphenation, and Indentations. This allows for quick formatting of large amounts of text and is vital for LD students to understand in order to understand layout design in InDesign fully.



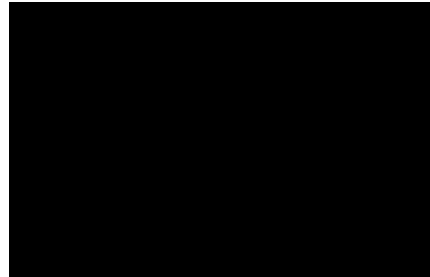
5. Framing Tools - the Frame Tool is a tool designed to place boxes with it inside the box. This marks the frame for insertion of photos, illustrations or backgrounds. The Frame Tool marks the space where an image will be placed — marking spaces before image placement is beneficial in understanding how your images will fit with text on the layout grid. There are variations of frame tools which include the Rectangle Frame Tool (F), Ellipse Frame Tool, and Polygon Frame Tool. When placing frames, it is essential to hold Shift to maintain object size when expanding, if you do not want the frame to size equally, then it can be adjusted from any side.

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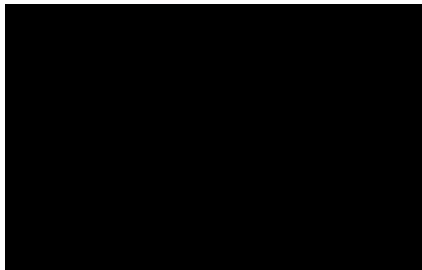
6. Shape Tools - this is a way to develop simplistic vectors directly into InDesign where you will not have to worry about linking external vector images from Illustrator. The shift key is held down to create perfect proportions, but without Shift, the shapes will adjust unevenly. After creating shapes, color can easily be applied with the swatches and stroke panels. These images work well to provide extra design elements within a document. Shapes can also be given effects (Object > Effects) that make them pop more on the page or make them more subtle.

Using the Drawing Tools, designers can make even more advanced elements by creating them manually instead of using prebuilt shapes. The Direct Selection Tool is then used in order to fix areas that did not turn out exactly right or to modify sides of the shaped piece by piece instead of changing the size as a whole.



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7. Page Tool - the Page Tool is one of the most useful of all InDesign tools. The purpose of the Page Tool is to quickly adjust portrait to landscape or any specific orientation of document size within the document. This tool can be selected using Shift-P and then by clicking on the desired page.



IMPORTANCE OF STUDENTS UNDERSTANDING TYPOGRAPHY

Initial class assignments should not start with typography but rather an introduction of the above essential tools, followed by tutorials and in-class demonstrations where the students follow along. After these demonstrations, the students should be given simple assignments such as postcards in order to get better acquainted with using the document, setting up margins and bleeds, as well as getting familiar with the essential tools. A postcard is an excellent first assignment where students can experience what it is like to use the tools with limited constraints.

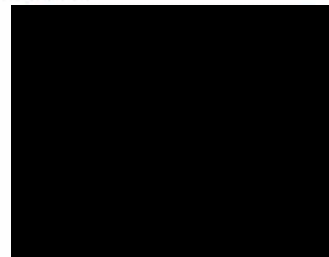
Next students should be introduced to typography fundamentals, even if its a review. The lecture of typography should consist of a presentation that is visually placed up on a TV or projector and include written-out elements on board and some hands-on interaction. For students to interact, various formats can include students writing out formats of typography they know of on the board or some handout where they must write out content or draw out typography elements as the lecture progresses.

It is essential first to address that type is how ideas are written and given visual form. Typography includes letters, but that is not the same in all language formats. In a lecture, it is essential to address that type is language, not just letters, and makeup of characters. Examples to present that include forms of typography are phonograms, ideograms, icons, symbols, pictograms, and the modern alphabet — understanding the variations in how typography is portrayed aids in students understanding the value and importance of placement and use throughout their design career.

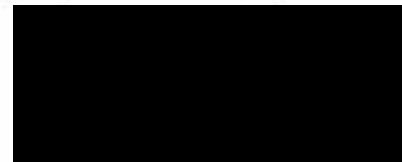
Next, students need to be aware of the differences between readability and legibility. This is another crucial factor as students need to design content that can be read and use typography that is also legible. Readability references how the text is written and prepared so that it is easily read. The readability of type depends on the color of text and how it correlates with

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the background, paragraph density, and proper use and formatting of grammar. When the text in InDesign is not readable, the document fails to relay the appropriate message. Bad readability leads to bad design and the inability to effectively provide a solution to users. When documents are not readable, or grammar is also poorly used, it can also be hard to understand a document's content. Finally, if the wrong color contrast is used, the user may not be able to read the contrasting elements or may find it too difficult to read large amounts of type; the type also needs to be a serif or sans serif typeface that is spaced and sized appropriately. See the example below for readability.



Legibility is the second component necessary to address when designing in InDesign. Students must make sure type is legible, meaning that on the character in the typography can be distinguished easily from another and letters and words quickly turn into sentences.

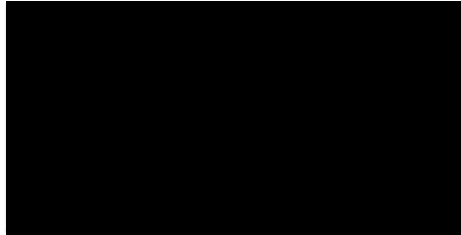


Beside of knowing typography legibility and readability, it is essential to focus next on the difference between the terms typeface and font, which even though are used synonymously, each has different meanings.

A typeface is a collection of characters, symbols, punctuation, letters, and numerals which are made up of the same design. A font is the physical development of the actual typeface. Therefore, the font is the ability to take the typeface and recreate it with a typewriter, letterpress, or computer.

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Note at this point that using InDesign is more than just using the tools, the tools are something students learn as they experiment and one-on-one interactions are conducted to represent new tool use and experimentation. But InDesign is about understanding the rules of typography and being able to use them effectively within a given negative space. The effective use of typography, arranged with other elements on the page, are what make the piece useful in design. It is about the directional flow of content as well as placement. The final component that addresses this is the anatomy of the typeface, which is critical to the best understanding of how words will space out alongside the way paragraphs will be seen.



When proper weights, spacing, and typefaces are used, spacing alignments promote a robust design, and students accomplish solving simple InDesign problems. The line heights and proper typography choices promote readability and legibility, single-handily the essential features in InDesign. When anything is impossible to read, or spacing is too close, then the design fails and does not relay the appropriate message to the target audience. Addressing the above in typography, alongside the basic tools, continues to build on the students' ability to use the software professionally efficiently. Practice, practice, practice, and repetition are essential. This makes duplication of explanation for most projects within the course and constant reference by the teacher to the student. Asking the students questions about what is wrong with type placements helps them also to learn how to achieve perfect harmony by making them think through issues that arise with placement or typography use.

LAYOUT AND GRIDS

When working in InDesign, students will need to understand the following: the grid is one of the most critical aspects of practical design layout. Students must understand the different types of grid systems and why they are essential. Grids benefit design as they provide structure. Using a grid allows you to plan out the areas of design for text, images, and other placement in regards to the hierarchy of elements. Each grid focuses on different placement to carry the eye from left to right and top to bottom.

At this point in the layout process, students should be given exercises that promote wireframing of grid layouts.

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Since they will have already practiced primary use of tools, students must now plan out space and understand where items will be placed. This provides LD students with the ability not to get stuck on the computer and be able to illustrate hands-on. It provides a way to think creatively and focus on special assignment of materials. When students can pre-plan out space, it helps reduce frustration and make the white page less intimidating. It also provides the students with a skeleton to build from. Working with LD students, most have higher levels of self-doubt and anxiety. Breaking assignments down into exercises this way promotes a step-by-step basis for them to develop and learn the process. When the process is learned gradually, LD students are less frustrated and better understand relationships. In classes, students have responded with compliments and are thankful when assignments are given extra time for consideration, in-class work to gain professor assistance and understanding, as well as time to think through each different issue as it arises in order to develop a solution that is functional and not rushed. The student then learns the programs through experiencing the program rather than being forced to take tests and learn easily forgettable terminology.

INDUSTRY USE AND IMPORTANCE

When teaching LD students, it is essential to relay real-world experiences and real-world examples for each project. Showing the students practical knowledge as they progress adds in their ability to associate how learning InDesign will benefit their graphic design careers. When working with InDesign, it is essential to address packaging files and print-based procedures, as those students that will go into publication design will need not just to know how to design each element but also need to understand how it is set up for printing. If the students are given all practical knowledge per project, then when they graduate, they will be ready to go through the step-by-step procedure of adequately preparing work for companies.

CLASS BREAKDOWN

Each class should always be presented with a visual lecture for the auditory students, and hands-on interaction for those tactile students, and visual imagery for those students that understand pictures of large amounts of text. If you can adequately touch on each of these senses for each class, students will interact and engage. Also, focus on asking questions to make sure students are paying attention to lectures as well as fun educational videos that make the subject more fun. Asking questions promotes engagement and attention. Remember, students will have all different LD types, but if you can address what each LD needs per class, you can maintain the attention of most students and involve them in all aspects of the educational process. Always break learning down into small steps and present materials in small amounts so students can easily take in information as the classes progress. Reinforce each class then build with new information.

Here are some sites that provide additional sources for teaching students with LD:

- <https://thefactista.com/essential-strategies-for-teaching-students-with-learning-difficulties/>
- <https://www.unh.edu/education/partnering-with-difficult-schools/essential-strategies>
- <https://www.unh.edu/education/partnering-with-difficult-schools/how-to-structure-and-communicate-to-teach-learning-difficulties/>

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