Introduction

In the LetterStudio second and third year students of the KABK and exchange students can take courses, i.e., modules, about letters in the broadest sense of the word. This includes, but is not limited to, writing, type design, font production, font technology (including coding), and everything else that is, or could be part of the métiers of the graphic designer, calligrapher, lettering artist, and type designer. The spectrum offered is determined by the staff lecturers, guest lecturers, and students, and the scope is not limited to the developments in the professional field. The expertise of the teachers implies that different or even opposing opinions are represented, which guarantees the versatility of the course.

Students must enroll in modules that cover the areas they wish to explore. The length of a module is a full semester (about twelve sessions) and two modules must be taken during one semester. It is mandatory to select modules that are divergent or even contradictory, i.e., represent opposing views. Selections must be substantiated and decisions are made in consultation with the teachers.

The level of the listed modules differs. In some cases, a first level module must be completed before moving on to the next level. In principle, the modules are determined by the teachers, but in exceptional cases custom modules can be set up by the students, of course in consultation with the teachers.

A mid-term assessment takes place halfway through the semester. You then give a pitch presentation for the entire group about the process and the progress of your studies. You do this digitally by using the large screen in the classroom and/or analog, for example by showing sheets with written and drawn letters. The idea is that you give an overview of your studies so far, elaborate on the result and what your goal is, and explain how you intend to proceed.

Individual assessments take place at the end of the semester. You have to present your study results to your teachers individually (so not for the group as in the mid-term evaluation). You will find the learning outcomes in the module descriptions. You should also write a short self-assessment (just a few lines) prior to the assessments. It should include information about your expectations, experiences, process, and progress, plus a reflection on the final results.

The modules below are arranged by supervising teacher (in alphabetical order).

FB_1. *From writing to type: the LeMo method* (level 1)

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Writing with a broad nib is a good starting point for exploring matters like construction, contrast sort, contrast flow, and contrast. However, translating handwriting into type is not very straightforward. Even for me as experienced calligrapher (for example, I set up a calligraphy course for the Dutch television and wrote a book for it end of the 1980s).

There is not much discussion possible about the fact that written letters were initially standardized and eventually formalized by the Renaissance invention of movable type. However, there is no known Humanistic handwriting predating

movable type that shows such a clear standardization as roman type. From my measurements of Renaissance prints, punches, matrices, and type – as part of my PhD research at Leiden University – I conclude that standardizing and systematizing matters as character widths were prerequisites for the Renaissance type production. Proportions and details of letters were adapted to this standardization and systematization.

In this module you will translate the Foundational hand (a formalized Humanistic minuscule), which you practiced with a broad nib in your first year at KABK's Graphic Design department into a digital typeface using the most recent scientific insight that is translated into the 'LeMo Method' (http://www.lettermodel.org/wordpress/?p=2365). Even if you are not a very skilled calligrapher you will still manage to produce a solidly rhythmically patterned type design. This module provides you with a good reason to improve your hand!

End terms

The emphasis is on the practical part, specifically on the translation of hand-writing into type.
– Presentation: a number of digitized glyphs and an essay. Also the essence of the study has to be presented on three A2-sized panels.
– Evaluation criteria: depth of the study, the quality of the digitation, and the gained insight into the matter.

FB_2. *Investigating micro-typography (level 1)*

The rise of desktop publishing in the second half of the 1980s changed the graphic landscape completely. Within a decade the highly specialized métiers of the typesetter and typographer were merged in that of the computerized graphic designer, irrespective of whether macOS, Windows, or Linux is used. Together with the operating systems come an increasing number of fonts and everyone is by definition a typesetter nowadays. However, not everyone is a typographer, because this requires specialist knowledge and insight. New terms as 'macro-' and 'micro-typography' have become popular nowadays, but they are only synonyms for typesetting and typography respectively.

All present-day graphic designers are 'macro-typographers' but not many will be able to provide the answer to questions like what exactly forms the basis for the patterning in type, or the related question regarding what is the origin of typographic conventions. Digital typefaces are becoming more and more sophisticated: OpenType Layout features can automatically adjust all kind of detailed matters, such as ligature substitutions, the application of contextual alternates, related positioning of diacritics, et cetera. For this, in the past the typographer had to write detailed instructions for the typesetter. However, to be able to judge the digital outcomes, a deep understanding of what exactly typography comprises, is necessary.

This module is meant the explore and study the details of typography in a time in which the emphasis seems to be more on concept than on exquisite refinement.

Not only technical and optical aspects will be investigated, but also the (historical) origin of the typeface used, the type designer in question, and the style period in which the typeface was made. You will have to define your goal, which could be a book, a (series of) posters, or a website, et cetera, as long as it will be possible to apply highly detailed typography.

End terms

The emphasis is on the practical part, which is the design of a book or leaflet(s) or a series of posters, et cetera. A brief (and well-designed) report on your research has to be produced.
– Presentation: a book or leaflet(s), or a series of posters, et cetera, and the report. Also the essence of the study has to be presented on three A2-sized panels.
– Evaluation criteria: depth of the study, the originality and quality of the font, and the gained insight into the matter.

FB_3. *Revival of a historic Renaissance typeface* (level 1)

For this module a revival has to be developed of a typeface from the Italian or French Renaissance. For this recent insight in Renaissance production methods, as presented on <http://www.lettermodel.org>, is used. The standardization of roman type structured the handwritten pattern and directly influenced details and proportions of letters. All of you have been conditioned by these letters and are capable of optically reproducing and judging the patterns. Hence, you could conclude that the origin of the patterns is purely an optical one. From my research at Leiden University <https://openaccess.leidenuniv.nl/handle/1887/43556> I conclude that matters are more complex.

This module will let you explore archetypal Renaissance patterning and the application of related artificial spacing of digital type using specialist software <https://www.revolvertype.com/tools/>. Also you will investigate tools for auto-tracing and generating fonts. This way you will gain more insight into the basics of typographic conventions. The basis for your revival is formed by *your* pictures from original sixteenth-century prints in the collection of the National Library of the Netherlands (KB) in The Hague.

End terms

The emphasis is on the practical part, which is the development of a revival. A relatively brief (and well-designed) essay on your research and the outcome has to be written.
– Presentation: a type specimen showing the revival and an essay. Also the essence of the study has to be presented on three A2-sized panels.
– Evaluation criteria: depth of the study, the quality of the revival, and the gained insight into the matter.

FB_4. *Defining a grapheme system* (level 2)

The collections of graphic symbols used for representing scripts are quite arbitrary. As soon as such a 'grapheme system' is set up, the further development (evolution) and consequently the related conditioning is defined by the applied

structures themselves. What is considered to be optically correct is only purely relative to (the conventions of) the grapheme system. This module comprises the development of a complete new grapheme system for the Latin script. Would it be possible for you to ignore or circumvent current conventions when defining a new grapheme system and related typographic rules, i.e., conventions?

Developing a new grapheme is great fun but it is also complex matter, hence this is a second-level module. You will have to convince me that you are capable of handling this stuff!

End terms

The emphasis is on both the practical and theoretical part; the study results in a newly-developed grapheme system and in a relatively brief (and well-designed) essay in which the development is explained and illustrated.

– Presentation: a type specimen (on paper or digitally/animated) showing the grapheme system and an essay. The essence of the study has to be presented on three A2-sized panels.

– Evaluation criteria: depth of the study, the originality of the solutions, the developed insight.

JR_1. *Python intro, generative letters, making digital typography* (level 1)

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In this module you will learn the basics of programming in Python, using the DrawBot application. You will program letterforms that are controlled by parameters. It's the **idea** of a letterform that you describe in the form of a program, that can produce various results based on the input parameters. This sounds rather abstract, and it can be quite abstract indeed, but it can also be – more likely – as concrete as for example to control the weight or width of your letterforms with a number.

You will not only **create** programmed letterforms, but also a typographical system so you can make simple typography, **using** your letters. This will give you a good feel for the inner workings of digital typography (whether for print or for dynamic media), and what steps are involved to go from a text (the copy) to organized shapes on a page or a screen (the layout) that can be read.

Process

• There will be about six group lessons of about 1,5 hours, where you will learn the basic building blocks needed to accomplish the task of the assignment. After that you will work individually on the project. You will use the DrawBot application, a Python environment that allows easy visual output, not unlike Processing. You will minimally create a full lowercase **or** uppercase alphabet. You will **not** create a font in the traditional sense; your alphabet remains a program, which may use color and all sorts of visual possibilities that DrawBot offers, that are **not** necessarily possible in a font editor. In fact, it is required to **not** use a font editor for this module.

Requirements

– You will need an Apple laptop, preferably running 10.9 or 10.10 (alternatively,

you may rent one occasionally and/or work in the computer lab).
– The DrawBot application: http://www.drawbot.com/
– You must have completed a Processing intro course or something equivalent.

End terms

– Presentation: You will present the possibilities of your alphabet as an A2 poster, as well as in a simple interactive presentation in DrawBot.
– Evaluation criteria: You must show that you have understood and can use the basic Python constructs. You must show that you understand the mechanics of digital typesetting. Show that you can translate and idea into a set of rules, and that you are able to translate those rules into code.

JR_2. *Python for type design* (level 2)

Python is the de-facto scripting language for type design. It happens to be included in quite a few font editors, for example FontLab, RoboFont, Glyphs and FontForge. The use cases for scripting in the context of type design are manifold. For example, automating repetitive actions while producing a typeface. Or to create shapes that are hard (or even impossible) to draw manually. Or to create shapes that are not fixed, but can change depending on parameters. Or to programmatically create proofs for otherwise more traditionally produced typefaces.

Within this module there are a few sub-assignments to choose from:
1. Create a typeface programmatically. Define the rules that describe your typeface and turn that into working code that outputs a font.
2. Create a typeface semi-programatically: start with manually created letterforms (yours!) and process them with your script to create variations. (This could be done in collaboration with some of the other LetterStudio modules.)
3. Create a complex system that requires OpenType features to automatically use alternate glyphs depending on the context. Interlocking letters? Use your imagination. (Combination with another LetterStudio module is possible.)
4. Formulate an assignment yourself. We can discuss the possibilities.
All these assignments require you to complete at least a full lowercase or uppercase alphabet and a minimal set of punctuation.

Process

• During this module you will learn about the various possibilities of scripting in the RoboFont font editor, through a short series of group lessons. There will also be an introduction to OpenType features, how to use them, and how to use Python to create them. You will also be shown how to create proofs (layouts to test and evaluate your typeface) programmatically. You will write scripts to create a font, or to process an existing font (made by you). The end result will be a working OpenType font that you can use anywhere, but the **process** of how you're getting there is essential.

Requirements

– You will need to have completed the Python Intro module, or have an equivalent understanding of Python.

– You will preferably use an Apple laptop with RoboFont installed (we can provide a temporary student license), but depending on what you will actually do, you can also use Glyphs, FontLab or FontForge (the latter two are also available for Windows).

End terms
– Presentation: you will present your font in at least two of the following ways:

1. An A2 poster (good for typefaces that are targeted towards display use).

2. A booklet (good for more text-oriented typefaces).

3. A 1–2 minute animation.

4. An interactive presentation, for instance a website or an app.

– Evaluation criteria: You must show that you can apply the learned techniques in a meaningful way to create a typeface. That can be rather hidden in the process of design and/or production, or abundantly visible in the typeface itself. Demonstrate how and why programming was essential in the creation of your project.

JR_3. *Modular Letter System* (level 1)

You will design a collection of reusable shapes with which you will create letterforms. The individual parts may only be moved and rotated, not scaled or mirrored. Parts may overlap each other. It is up to you how many parts you will design, but be aware that less is not necessarily more: for example, with a single square you can do everything but you'll end up designing a pixel font, which is not the right challenge for this module.

The technique with which you will execute the assignment is free (it can be completely analog for example) but your approach needs to be systematic. Including a role for coding in your process is highly encouraged.

Your approach can be based on more traditional methods (for example look at writing with the broad-nibbed pen, or Frank Blokland's LetterModel), or you can take more freedom and experiment more wildly. The results still need to be recognizable as letters, though.

Process
• You will need to look at the task from two sides. On the one hand, you will make shapes and combine them to make letterforms. On the other hand you must look at letterforms and deconstruct them into parts. The design of the parts and the design of the letters go hand in hand.

Requirements
– The minimum number of letters you will design is a full upper- or lowercase alphabet and some basic punctuation (period and comma).

End terms
- You must present two things at the end of the module:

1. A visual explanation of your Modular Letter System (how it works, how the parts are used).

2. Your letterforms in use (for example in a poster).
The medium and format is free. Print is fine. An animation is fine, too.
– Evaluation criteria: You must demonstrate that you've done research about letterform construction and that you've gained more understanding of how shapes can repeat (or not) within an alphabet design.

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Adjustments for blended learning situation:

Creating a shared experience inside and outside LetterStudio class:
It is useful to share your ideas and insights with others who have chosen the same module. This can be done in consultation during the different LetterStudio lessons of group A or B. Find a way to create a platform included the fellow module members of the other group as well.

It is allowed to work on a font/project together with a fellow module member. LetterStudio is for an important part about learning together.

It is not a condition to obtain approval from the relevant teacher to take further steps in the design process. Be aware that there is a very low frequency of a total of three teaching moments from each group in this semester.

Digitizing process should be experienced and shared with, at least, one fellow LetterStudio student. Sharing the workload of creating digital fonts, which contain the vital desired glyph set. Exchange your findings and create a working relationship to learn from each other.

For instance:
Module 1 Contrast collaboration structure:
Three different weights should be produced. Divide the workload together with two other students who picked the same module. Each of students in this group is finishing one of the three desired levels of contrast in digital format:
1. Regular contrast, 2. High contrast, 3. Low contrast.

PV_1. *Contrast research* (level 1)

This module makes you familiar with the domain of the contrast sort ‹translation› and different amounts of contrast. Physically drawing type will be an important aspect of practice initially as well as digitizing later on. Starting to write with the flat brush you define the basic shapes and constructions of letter shapes. These shapes have to be transposed into three different contrast variations. Normal, high and low contrast. This exercise will give you quite some vital insight in the process of type design and understanding of proportion, spacing, weight, construction and contrast in letterforms.

Required glyph set: OHamburgefonstiv., and not to forget the (word)space glyph to be able to set text.

End terms
– Presentation: present the words at text sizes, together with sample texts using

the different characters (glyphs). Make a process book with clear explanations/comments and critical remarks.

– Evaluation criteria: understanding the difference in contrasts: High to low. Translation to expansion. Practice drawing. From manual to digital. Being able to make relevant design decisions which lead to greater functionally. Define relevant typographic criteria based on the defined and designed typographic system. Planning the process.

PV_2. *Script* **(**level 1**)**

The origin of type is handwriting. Design a typeface based on handwritten shapes. You can use an existing handwriting or create a script of your own. Interpret the handwriting and design a consistent range of lowercase and uppercase letters. Experiment with different writing tools and construction styles in different sizes. But also vary the parameters for weight, slant, width. Explore the relation between size and detail to get to the desired level of abstraction in the letter shapes and its typographic structure/pattern. Stylistically handwriting can differ in many ways, from modestly formal to exuberantly expressive. The letters need to be digitized for applications.

The range of required glyphs: capital letters, lowercase, figures and punctuation marks.

End terms

– Presentation: make an overview of your research path together with a type specimen explaining the process of design from begin to end with critical remarks. Present the functionality and usability of the typeface at the required size(s) and the exact materializations.

– Evaluation criteria: understanding the specified limitations in dynamics for the individual shapes of the letters in relation to each other and the whole. Show the ability to vary in many stylistic diversities. From expressive to modest. Being able to make relevant design decisions which lead to greater functionality. Practice drawing. From manual to digital. Define relevant typographic criteria based on the defined and designed typographic system. Ability to (re-) create in digital domain, by handling software to manipulate contour descriptions of letterforms. Planning the process.

PV_3. *Stencil type* **(**level 1**)**

This specific technique is developed for labelling in the first place. Explore the possibilities within the restrictions which depend on different types of stencils. Make a lot of different stencils. Explore different sizes and different applications. N.B. Applied stencils do not always expose the direct interrupted nature of the stencil.

Production of the stencils and instructions how to apply them is required. The range of required glyphs: capital letters, lowercase, figures and punctuation marks.

End terms

– Presentation: make an overview of your research path together with a type specimen explaining the process of design from begin to end with critical remarks. Present the functionality and usability of the typeface at the required size(s) and the exact materializations. Instruction for stencil-application (positioning/aligning and spacing) should be incorporated.
– Evaluation criteria: understanding limitations and dynamics for specifying the individual letter shapes in relation to each other and the whole. Show the ability to vary in many possible stylistic diversities. Being able to make relevant design decisions with lead to greater functionality. Planning the process.

pv_4. *Monospace typeface* (level 2)

The most optimal width relation for (Latin) lettershapes is proportional. Each letter has its independent width related to its proportion. Some glyphs have more complicated structures than others, and are therefor wider. A monospace typeface contains letters with all having a single width. (The counters between the letters are incorporated within this width.)

The range of required glyphs: capital letters, lowercase, figures and punctuation marks.

End terms

– Presentation: make an overview of your research with a type specimen explaining the process of design from begin to end with critical remarks. Present the usability of the typeface at the required size and the exact materialization.
– Evaluation criteria: understanding the specified limitations in dynamics for specifying the individual shapes of the letters in relation to each other and the whole. Show the ability to vary in possible stylistic diversities. Practice drawing. From manual to digital. Being able tomake relevant design decisions which lead to greater functionally. Define relevant typographic criteria based on the defined and designed typographic system. Planning the process.

pv_5. *Type design, free of choice* (level 2)

This module is for students who already have spent another semester in LetterStudio. In consultation you can work on your own typeface. This could start with a description of the desired use and application. How could these requirements be of influence to the style and shape of your letters? Define shapes by using parameters like: contrast (sort and amount), construction, proportion, weight, width, slant. And experiment with contrasting characterizations for instance: rigid vs. flexible or abstract vs. detailed. Make a series of TypeCooker-drawings to exercise your drawing and sketching skills.

The range of required glyphs are: capitals, lowercase, figures and punctuation marks, etc. Possibly with additional glyphs/weights/variations depending on the requested use/performance. The result should be a digital font.

End terms

– Presentation:make an overview of your research path together with a type specimen explaining the process of design from begin to end with critical remarks. Present the functionality and usability of the typeface at the required size(s) and the exact materializations.

– Understanding the limitations and possibilities in dynamics for specifying the individual shapes of the letters in relation to each other and the whole. Show the ability to vary in possible stylistic diversities. Practice drawing. From manual to digital. Being able to make relevant design decisions which lead to greater functionally. Define relevant typographic criteria based on the defined and designed typographic system. Planning the process.

Tips, advise and suggestions in random order:

– When designing letters always judge them in a word shape, definitely not in alphabetical order. Preferably in the context of the desired application. (Simplicity can create difficult optical results: designing a low contrast sans serif is more difficult than you might think.)

– Do not be distracted and too much influenced by examples, but focus on your own results. Examples are mainly there to convince you that the possibilities are endless.

– Be there every lesson, even if the results are disappointing.

– Don't be scared of making mistakes. Those are necessary to make to progress. Learning comes from failure and self correction.

– Read the module descriptions carefully regularly. So you know what to do and what is expected (end terms).

– Sketch at least a new and different styled letter a day in your dummy. Experiment.

– Make use of the workshops at the KABK. Lasercutting, printing, etc. N.B. Make appointments on time.

– When in doubt draw.

– To exercise your drawing/sketching skills make a series of TypeCooker-drawings: <http://www.typecooker.com/>. More information can be found in this article: <http://www.letterror.com/articles/typecooker.html>.

– Broaden you horizon on type & typography by visiting the KABK library and institutions outside:

Museum Meermanno, KB (National Library of the Netherlands), UvA Special Collections in Allard Pierson.