

The Graphic Design Department at NC State has integrated computers and digital media with design and learning for over a decade — the department was the first in the UNC system to require student computer purchases. Courses are held in a studio environment where each student has a personal workspace that includes a desk (with a lockable storage compartment) and access to the university network and e-mail via ethernet connection, as well as wireless. Graphic Design integrates computer technology in virtually every step of the design process (from conception to production to distribution) and in a wide range of media (from print to screen to projection).

## **2009 Hardware + Software**

### **Purchase Recommendations List**

This document outlines items required for sophomore graphic design students entering the 2009 fall semester. Students must plan purchases to ensure delivery of their hardware and software prior to or on the first day of class.

Adobe and Apple — the developers for most of our requirements — routinely release new products and/or updates to their existing product lines. And this can occur close to the beginning of school or at the time of purchase. Please note that summer is known to be the preferred season for many computer industry releases and updates. And, that new products may have a delivery date past the beginning of our academic semester. This could leave one without a computer and/or software in required core courses. With this in mind, please review delivery dates on anything you plan to purchase. For the latest educational prices on Apple computers and Adobe software, visit the North Carolina State Bookstores online at: <http://www.fis.ncsu.edu/ncsubookstores/computers.html> or phone (919) 515-3400. NCSU Bookstores can provide savings even over regular educational prices. Students should compare prices before making their final purchase.

Apple is the industry standard computing platform for graphic design. Most models (configurations) in the MacBook Pro, iMac, and Mac Pro lines will be sufficient, but one may want to upgrade or customize options — here are a few things to consider: Higher processor speeds result in faster processing of files. Processor speed is measured in gigahertz (GHz). Memory or RAM is measured in gigabytes (GB). Greater GHz and RAM equals greater working speed and usability. Additional services and hardware may also include Apple's AppleCare service plan, headphones, external/portable hard drive, memory stick and (later) an inkjet printer or a basic scanner.

### **Computer Configurations to Consider**

- MacBook Pro ("laptop") — Laptops are compact and very useful for their portability, but can be difficult to use for extended periods of design and may reduce some types of productivity (small screen sizes characteristic of all portable computer devices are an issue for some, for example). For this very reason, it is highly recommended that an additional display and extended keyboard be included. Displays from other vendors will work with Apple computers.
- iMac ("all-in-one") — iMacs are 'all-in-one' personal computers (display monitors are built-in, making for a single computer box). This makes them compact and fairly portable.
- Mac Pro ("tower") — These top-of-the-line models offer greater expandability/upgradeability. They do not come with a built-in display so the purchase of a dedicated display is required. Displays from other vendors will work with Apple computers.

### **Digital Camera Specifications**

Sophomores will take GD210 Imaging I in their fall semester. This course is an introduction to image making and requires the purchase of a digital camera. With a wide range of models and features available out there, here are the most important facts to keep in mind when looking for an adequate purchase: Digital cameras are ranked by their megapixel count — more "megapixels" equals more "quality."

A minimum of 8 megapixels for the camera is required, as well as manual over-rides on automatic exposure and possibly focus controls. Manual focus control is often indicative of a better camera (look for this feature as one of the criteria when seeking a better option). Compatibility with the Apple platform is also essential. Rechargeable device-specific batteries and charger is also key (cameras running on over-the-counter consumer batteries are not adequate). Digital cameras also need Memory Cards to temporarily save your images as you work through a photo shoot. These come in several sizes and are manufactured by a variety of known brand names. Memory Cards that come with newly-purchased cameras (manufacturer-provided) are generally of low capacity and, in a sense, generic (they facilitate only "start-up/novice" use of the equipment). To shoot more pictures before needing to repeatedly download them to a computer, purchase an additional card or cards with higher storage capacity (a 1GB Memory card is our base recommendation).

Optical versus digital zoom is also recommended and cameras with the ability to attach lens are a plus, but not required. It is highly recommended that you try a range of cameras before purchase. Find one that feels right for you and which allows you to be comfortable while shooting — particularly while shooting in manual mode. For online reviews visit <http://www.dpreview.com> and <http://www.cnet.com>.

## Software Specifications

Fall sophomore courses require the following Adobe software: Photoshop, Illustrator, and InDesign, which may be purchased as a bundle named “Adobe’s Creative Suite 4:” [http://www.adobe.com/products/creativesuite/?ogn=EN\\_US-gntray\\_prod\\_creative\\_suite\\_family\\_home](http://www.adobe.com/products/creativesuite/?ogn=EN_US-gntray_prod_creative_suite_family_home)).

Adobe Creative Suite 4 is now available in several different bundles. “Creative Suite 4 Design Premium” is the next “step up” from the “Design Standard” version and recommended for Graphic Design students (it includes InDesign, Acrobat, Illustrator, Photoshop Extended, plus Flash Professional and Dreamweaver). Spring sophomore courses may later require Dreamweaver, while post-sophomore-level courses may require additional supporting software (such as Flash). These requirements will be announced in time by faculty teaching those specific courses. Software updates occur frequently — the latest versions should be purchased in time for use in the course. And remember that, as with Apple’s possible new products, it is important to keep in mind the beginning of fall semester and delivery dates for any purchases.

You will also need: TypeTool 3, [http://www.fontlab.com/index.php?option=com\\_content&task=blogcategory&id=80&Itemid=39](http://www.fontlab.com/index.php?option=com_content&task=blogcategory&id=80&Itemid=39) and the Adobe Font Folio Education Essentials CD: <http://www.adobe.com/education/products/fontfolioeducationessentials/>

## Hardware Checklist

- Apple computer (MacBook Pro “laptop,” iMac, or Mac Pro “tower”)
- display (highly recommended for laptops, required for towers, second display optional for iMacs ... note: third-party vendor displays will work with Apple).
- ethernet cable (“category 5, RJ45”, for connection to network in studio)
- security cables and locks
- surge protector
- Digital camera (8 megapixel minimum)

## Software Checklist

- InDesign, Acrobat, Illustrator, Photoshop Extended, plus Flash Professional and Dreamweaver (Creative Suite 4 Design Premium)
- TypeTool Basic Font Editor
- Adobe Font Folio Education Essentials CD