Guild of Blades Retail Group
Print-on-Demand Playing Card Design Guidelines

First, it should be understood that we here at GOB Retail are not going to attempt to set standards for card design or even hint at the thought that there should be any sort of standard. That said, however, having pioneered and operated a print on demand service for playing cards for over a year, we have garnered some experience with regards to the affects of certain designs on the visual outcome after the printing and die cutting of said cards. This document will attempt to illustrate the visual difference for different card designs from borderless cards to colored and white bordered cards with varying border thicknesses.

A key aspect of card design is designing for the production process. The POD card production process is similar to that of traditional offset printed playing cards, though tends to have a slightly larger range of print and die cut registration variance. How well your POD cards will look will in large part depend on how well your card design is prepared to cope with the variances that can happen in production. On the following pages we will show off a number of card designs and illustrate the potential post-printed and die cut results for each design by showing cards that are perfectly cut, cards that experience the "average" amount of registration drift and cards that experience the maximum registration (rare, but does happen to a small percentage of cards). For these purposes, as the print bleed (we'll define that a bit below) is set to .1", the maximum allowable registration drift is also .1". Any cards that experience a greater degree of registration dift, either in printing or in die cutting, are tossed out and reprinted.

The Basics:

A standard sized poker/playing card is 2.5" wide by 3.5" tall with four rounded corners with the corners having a 1/8" radius rounding. This is the standard card size that we cut and the size we have an existing cutting die so there is no additional die cutting charges for us to produce this size for you. For the purpose of demonstrating card designs here, we shall assume the cards are our standard size.

Bleed Trim:

While a standard playing card is 2.5" x 3.5", the card design/artwork that will need to be designed to work with our printing and die cutting process will need to be 2.7" x 3.7". This adds a .1" bleed trim to all four sides of the card. If, in a perfect world, the card prints exactly where it should on a press sheet and is cut exactly centered, then that extra .1" on all four sides of the card will be cut off and not be a part of the final card.

It should hopefully be obvious that the bleed trim area should not contain any aspects of a card's design which is meant to be a part of the final card. As those areas are designed to be cut off. So the .1" bleed trim on all four sides should simply be a non vital extension of your white or colored card border, or should be your card artwork background stretched out so that it covers the full 2.7" x 3.7" area. Your final card design should include this bleed trim, so when it comes times to place your card artwork onto press sheets to make ready for print (see our Card Press Sheet Layout Tutorial) you will have a 2.7" x 3.7" image.

Interior Trim Safe Area:

Due to printing and die cutting registration variances it is rare for a card to end up printed "exactly" where it should on the press sheet and it is equally rare for the card to be cut "exactly" centered when being die cut. Both processes have small variances or print tolerances. In the printing world, this is called "registration". The closer to perfect a print or die cut is, the tighter or closer its registration is. It is the fact that regitration variance occurs that bleed is necessary to add to images.

It is easy to understand the necessity for the extra bleed along the exterior of our image, but on an item as small as a playing card, it becomes equally important to focus on the area on the "inside" of you ideal cutting line. You can think of an interior trim line as being an interior bleed. Since the bleed trim for your playing cards is a .1" on all sides, then you should assume your interior bleed trim is also .1" on all four sides. This is an area extending .1" on the inside of your card. This area is potentially at risk of being cut on one side or the other due to registration variance . It is important to NOT put anything of importance, either graphically or text based, within the .1" interior bleed area, as those objects might cut partially or fully cut. Further, you should consider what your card might look like on any side, should registration shift enough so where you card gets cut shifts the full .1" to one side or the other. This will mean your exterior bleed area on one side would be fully a part of the card and .1" on the other side of your cut would have been cut away. Visualize that affect when designing your

card templates and play around with cropping your templates to those extremes to better help you design a card that will look good in all circumstances. See a few sample card designs below for some examples of registration variance and its affect on the look of a finished card.

In the imsage sample below, the extrerior boundary of the yellow line represents the edge of the cards after cutting.

Samples of a card with a full color border. The actual "border" of this card, including the bleed is .3" on all sides. This means .1" exterior bleed, .1" interior bleed plus an additional .1" border. Thus, in the absolutely worst case registration cut, there will still be a .1" blue border remaining.

Card cut perfectly centered. (top)
Near perfect happens about 30%.

Card cut about .04" off center. (top)
Fairly typical result. About 40%.

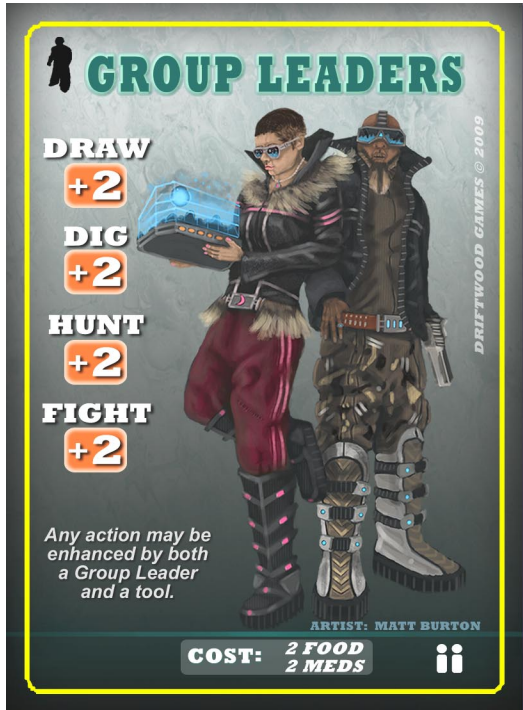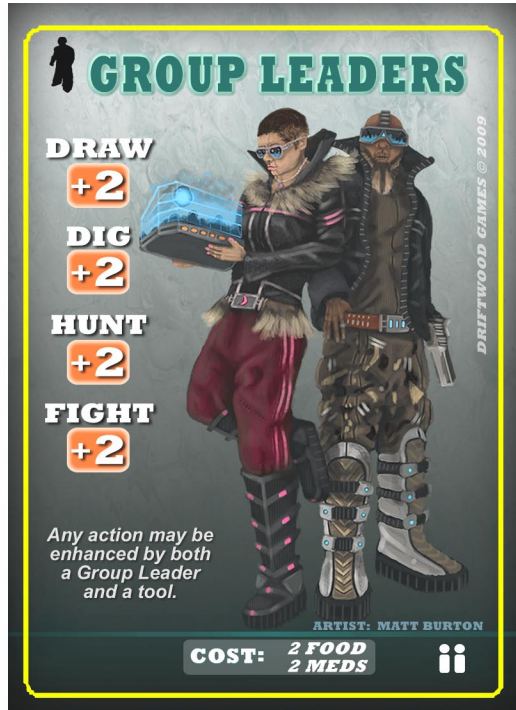Card cut about .07" off center.
Happens some. About 23%.

Card cut about .09 to >1" off center.
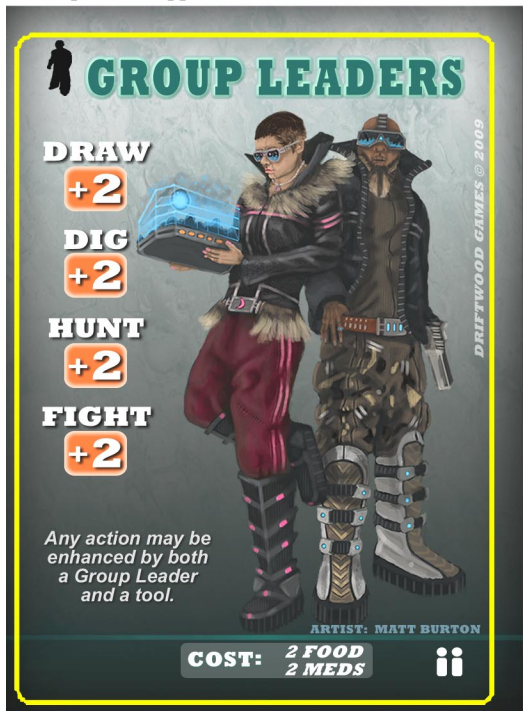Not often. About 7%.

In this next example we have a borderless card design courtesy of Driftwood Games. One way to avoid potentially ugly borders due to registration variance, of course, is to have no borders. But even borderless cards must pay attention to the interior bleed concept. This card is a good example of a card that has a fair bit of text and graphical elements near the theoretical interior bleed line, but where most of those elements remain safe from cutting. In illustrations 1-3 you see that all card elements remain uncut. Only in the 4th and most extreme registration drift (a full .1" off) does the small black figure icon in the upper left of the card get trimmed. While the yellow line is covering up parts of the copyright text, it is the exterior of the yellow line that represents the cut, so that text just barely falls on the inside of that line and remains a part of the card.
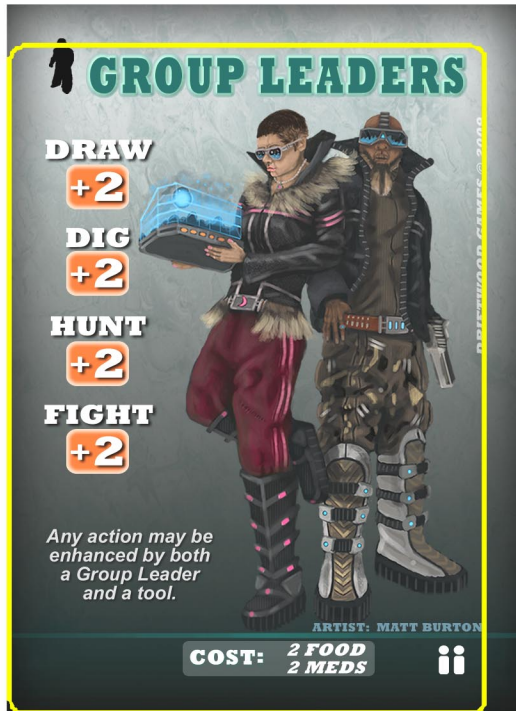

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Happens some. About 23%.

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Not often. About 7%.

Now, if you want to live dangerously, put lots of key stuff along or beyond the interior bleed line (that would be .1" inside the ideal edge of the card), but expect some to get trimmed into on some of the cards.

Now, in this case, only the one element was in that danger zone and it just happens that the top to bottom registration is typically more accurate than the left to right, so when doing a run of those cards, we saw no instances of that little black guy getting chopped. But if you want to guarantee such, stay within the interior bleed trim area.

If you are not sure if all of your elements are within that safe zone and free of risk of being trimmed, then make a 2.3" x 3.3" rectangle and drop it dead center on your card. Anything you see peeping out beyond that rectangle is beyond the safe area.

File Prep:

All cards should be designed at 300 DPI. Only very rarely does any image or artwork have the potential to print out sharper at a higher resolution on ours or most any digital machine. Those tend to be black and white photographs only. If your cards don't contain any black and white photos, DO NOT make the cards above 300 DPI. If you feel your cards may have a good reason to be over 300 DPI, contact us about it first and send us a sample. Card press sheets submitted at over 300 DPI without prior approval from us will likely be rejected. Such files greatly extend to pre press set up process and slow down the actual printing.

To RGB or CYMK. Our printer an handle either. That said, we almost always recommend that art and files be saved in RPG format. Because unless you have designed your cards while using a CYMK art monitor, your monitor is almost certainly showing you your images in RGB. So savings your artwork in RGB will most likely get you the color result closest to that which you have seen on your screen.

Your cards will need to be placed onto press sheets of 18 cards before we can print them. We have a press sheet layout guide and template to assist you with that process. Please refer to http://www.gobretail.com/podcards.php for said guide and template. If you lack the necessary software, skill or perhaps time to do said layouts, GOB Retail can do them for you for a small additional charge of $15 per press sheet face. That rate includes one free card "backs" sheet, so if your card set contains all the same card backs or the same set of card backs that are to be printed onto all press sheet "fronts", then you would only need to pay for your card fronts press sheets.

Please refer to the press sheet layout guide for instructions on best ways to send us files.

Color Variance:

All printers, be they small offset presses, massively large web (news print) presses or digital printers do not manage to print each copy exactly indentical to the last. Sometimes colors fade, inks run thin, the machine prints a particular color a bit darker than its suppose to. Offset presses can "control" this somewhat throughout a print run and keep variance to a minimal by way of an attentive and skilled press operator. This doesn't mean you will get no variance, simply they should be able to limit the instances of such to a small fraction of the run. Get a bad press operator, however, and you could get colors that are all over the place.

With digital printing presses, that which we and any other POD operation would be using, we experience color variance as well. The digital presses are more "stable" and consistent on average while requiring no constant tweaking by a skilled operator, but they also lack the ability for a skilled operator to, well, sit there and tweak the output as a print run is running. As such, a bit of color variance will occur. Its nearly a guarantee. This means a bit of shading differential where certain colors may come out a tad lighter or a tad darker from print to print. This is typically only an amount of variance you can detect when comparing multiple copies together for a comparison and even then is only noticable by someone really "looking" for it.

While digital pressed have made extraordinary leaps in print quality in recent years and can now equal or even surpass the sharpness of color quality from many offset presses, there are a few "quirks" tied to specific colors. It seems just about all color digital machines experience a greater degree of variance with red and green colors, but most specifically red. Additionally, large areas of the same mid darkness colors or grey shading can "confuse" the poor printers and those area can experience some color shading variance making it looks like even than one might desire. This affect almost never happens with dark, dark colors such as blacks, dark blues, browns, etc, and also almost never with very light colors like tan, yellow, very light blues, etc. Regardless of your chosen colors, the likeliness of color variance due this reason drops significantly by simple avoidance of designs with large areas of the same color and shading.