



Woodson Art Museum in your classroom



Tiffany Glass
Winter 2016-17

Top: Detail from Tiffany Studios, New York, *Apple Blossom Library Lamp*, ca. 1905, leaded glass, bronze; Below: Tiffany Studios, New York, Clara Driscoll, designer, *Wisteria Library Lamp*, ca. 1901, leaded glass, bronze. All artworks and images from The Neustadt Collection of Tiffany Glass, Queen, New York.



Above: Detail from Tiffany Studios, New York, *Begonia Reading Lamp*, ca. 1905, leaded glass, bronze;
Below: Louis Comfort Tiffany, *Favrile Vase*, 1909, blown glass; *Victorian Art Glass Basket*

Introduction to Exhibitions on View



This winter at the Leigh Yawkey Woodson Art Museum, three complementary exhibitions focused on art glass showcase the range of materials, forms, and designs spanning three iconic movements in American decorative arts: Victorian Era, Gilded Age, and Art Nouveau.

[*Tiffany Glass: Painting with Color and Light*](#) includes twenty Tiffany Studios leaded glass lamps, five large stained glass windows, hanging shades, and three forgeries modeled after Tiffany's iconic lamp designs, all from [The Neustadt Collection of Tiffany Glass](#).

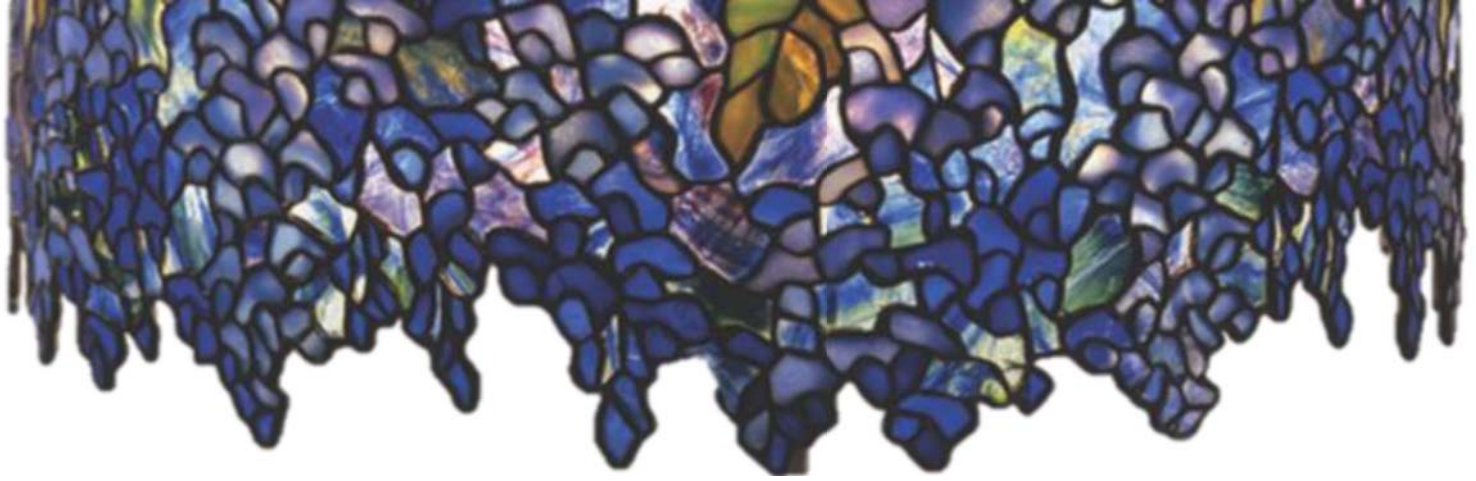
For more information about the exhibition and The Neustadt Collection, check out the [Woodson Art Museum's free app](#) and [videos on our Youtube Channel](#).

Two exhibitions from the Woodson Art Museum's glass collection juxtapose the intricate, feminine designs of the Victorian Era with the more modern and restrained aesthetics of the Art Nouveau period. [*Enduring Beauty: Art Nouveau Glass*](#) features bold iridescent glass in sleek undulating forms typical of the decorative, yet utilitarian, turn-of-the-twentieth-century glassware.

[*Victorian Art Glass Baskets*](#) also from the Art Museum's collection, feature bright colors "woven" throughout delicate glass reminiscent of frills on tutus and unfurling flower petals. These blown-glass baskets were collected by Alice Richardson Yawkey, the mother of the Museum's namesake, Leigh Yawkey Woodson.

Each exhibition presents distinct materials and styles of art glass, providing ample opportunities for students and visitors of all ages to consider, compare, and critique varied approaches to American glasswork.





Detail: Tiffany Studios, New York, Clara Driscoll, designer, *Wisteria Library Lamp*, ca. 1901, leaded glass, bronze



Louis Comfort Tiffany

Louis Comfort Tiffany (1848-1933) was a prolific and dynamic designer whose artistic career included work in oil painting, ceramics, metalwork, jewelry, furniture and textile design, and, most notably, art glass. Tiffany's legacy as an innovative glass artist along with his successes as an entrepreneur and businessman ensured his recognition as one of the most celebrated American designers of the late-nineteenth-and-early-twentieth centuries.

The son of famed New York jeweler Charles Lewis Tiffany (the founder of Tiffany & Co.), Louis Comfort Tiffany was raised amongst the tastemakers of New York City's elite. Deciding to pursue art, rather than the family business, Tiffany invested his creativity in painting, traveling throughout Europe and North Africa to learn from acclaimed painters of the time such as George Inness and Léon-Charles Adrien Bailly. Tiffany's travels inspired his paintings and also allowed him to recognize what drew him



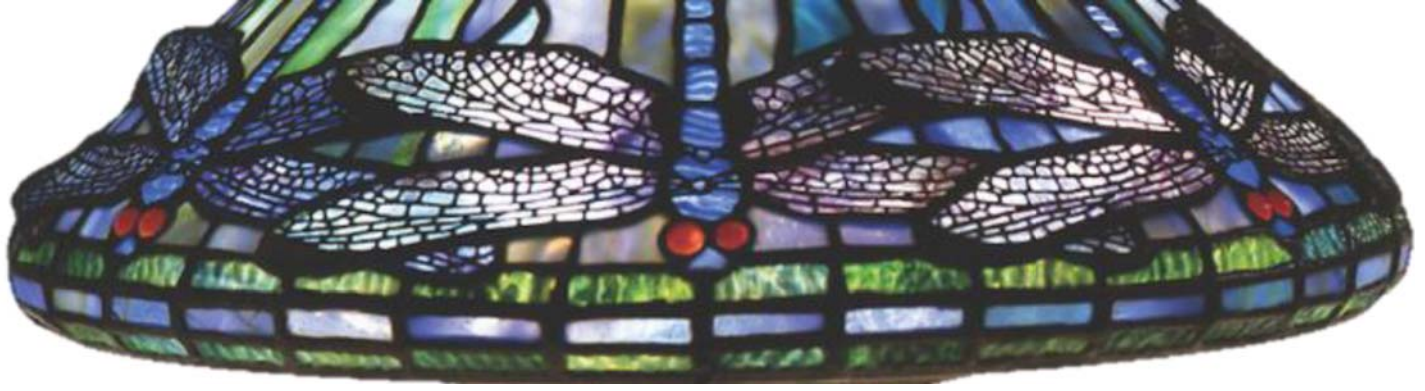
Louis Comfort Tiffany, *View of Cairo*, ca. 1872, oil on canvas

to certain subjects and scenes – color and light. Speaking about his time abroad and its influence on his work, Tiffany said “When I first had a chance to travel in the east and to paint where the people and the buildings are clad in beautiful hues, the pre-eminence of color in the world was brought forcibly to my attention.”

By the age of twenty-four, Tiffany was studying the chemistry and techniques of glassmaking and by 1875 he began experimenting with glassmaking in search of new ways to improve upon centuries-old stained-glass techniques.

Tiffany continued his experimentations with glass, working in several glasshouses in New York until 1878. He then turned his

attention to interior design, forming the Louis C. Tiffany and Associated American Artists firm.



Detail: Tiffany Studios, New York, shade designed by Clara Driscoll, *Dragonfly Reading Lamp*, ca. 1899, leaded glass with metal filigree, bronze



TIFFANY GLASS AND DECORATING COMPANY.
FOURTH AVENUE, SOUTHEAST CORNER OF 25TH STREET.

The lavish New York City homes of the Gilded Age (approximately 1870s through 1900) provided Tiffany and his group of artists and craftsmen ample clients and spaces to design and decorate, including President Chester A. Arthur's White House and Mark Twain's Connecticut mansion. The Associated American Artists firm designed and produced wallpapers, textiles, and furniture for about four years until Tiffany's interests in glassmaking led to the opening of his own glass factory in Corona, New York. In 1885, Tiffany established his own glassmaking firm, Tiffany Glass Company (later "Tiffany Glass and Decorating Company"), which in 1902 became known as Tiffany Studios.

Tiffany Studios

Tiffany Studios became a hub for the creative and economic machine of Tiffany's creative pursuits. The Studios were filled with hundreds of artisans, chemists, factory workers, designers, draftsmen, and, of course, Mr. Tiffany, who served as Art Director, overseeing the work of his employees across multiple departments. Tiffany Studios functioned much like a historic guild where artists and craftsmen worked under and for the name of a more established artist. While

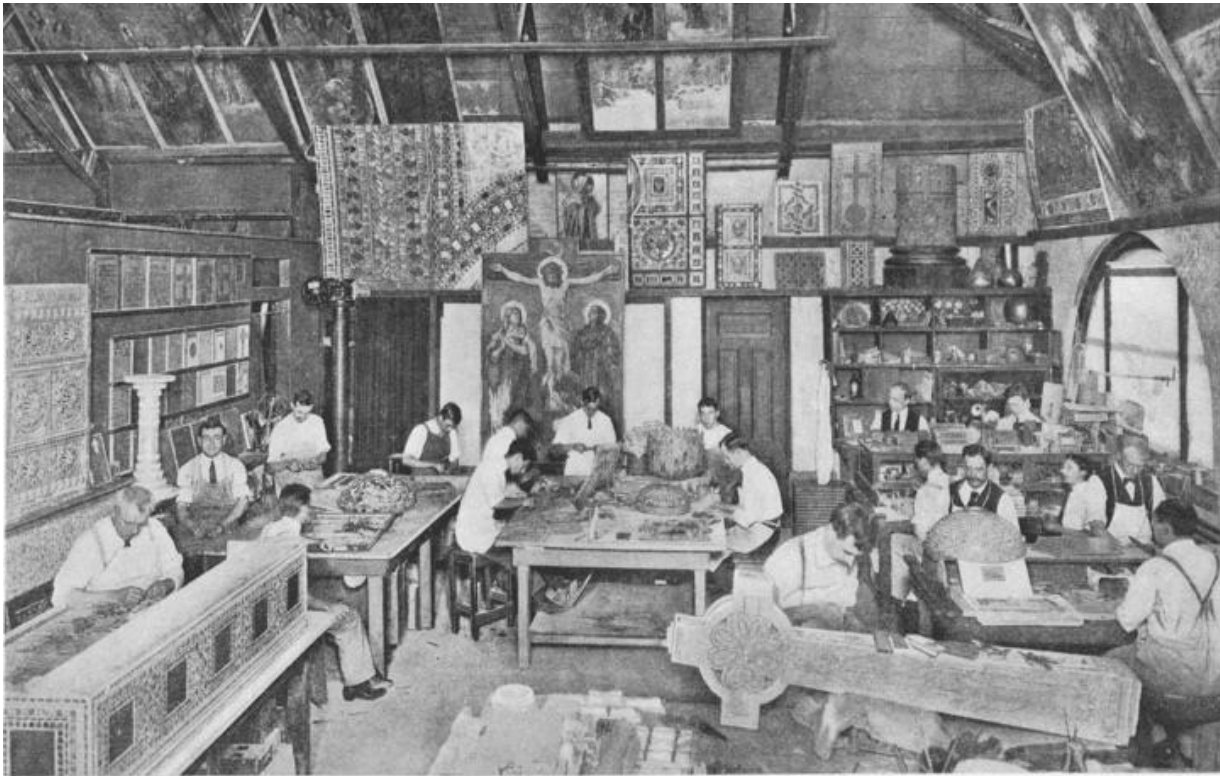


METAL SHOWROOM

TIFFANY STUDIOS

that is true of Tiffany Studios, Mr. Tiffany did credit some designers for their specific pieces as they were promoted for sale to the public.

Guided by the designs and direction of Louis Comfort Tiffany, Tiffany Studios produced leaded-glass windows, mosaics, glassware, lamps, pottery, enamels, metalwork, and jewelry. Tiffany saw his stained-glass windows as the most artistically significant pieces produced by the Studios, and despite their enormous popularity, viewed the leaded-glass lamps and shades as a less valuable, less sophisticated enterprise.



MOSAIC SHOP

TIFFANY STUDIOS

“Go after the money there is in art, but the art will be there just the same.” – Louis Comfort Tiffany



GLASS SHOP

TIFFANY STUDIOS



Tiffany Studios, New York, *Poinsettia Hanging Shade*, ca. 1905, leaded glass, bronze

Tiffany's Glass

Tiffany Studios utilized multi-colored, textured, patterned, and **opaque glass** with the same precision as a painter uses brushes. Selecting, cutting, leading, and soldering thousands of small pieces of glass took a masterful hand and artful eye, but before work began in Tiffany's workshops, the glass had to be made.

Tiffany's departure from the use of pot metal glass, which was uniform in color and **transparency**, led to the development of **opalescent or American glass**. Traditionally, when using pot metal glass, artisans painted the

glass surface with a glass paste or **enamel**, to add form and detail to stained-glass works. However, with opalescent glass, varied color, opacity, and texture were inherent in each sheet, allowing for the artistry of glass fabrication and selection to flourish. Tiffany's energy and investment in pursuit of superior glassmaking revolutionized the industries of blown-and flat-glass production.

In 1882, Tiffany hired skilled English glassmaker Arthur Nash to oversee his Corona, Queens furnaces. Nash brought to Tiffany his method of blending colored molten glass to achieve variations in hue and texture in the final, flat-glass product. Tiffany patented this improved method of multi-colored glass production and used the word **Favrile**, coming from the Old English word febrile or "hand-wrought" as a general term for the artisan-produced glass. Tiffany's handmade Favrile glass garnered international attention for its exotic and enticing iridescent qualities and bright, unexpected colors.

Tiffany's masterful glassmakers produced an unlimited range of opalescent glass, fueling the work of Tiffany Studios craftsmen. Stained-glass artists depicted an impressive range of subjects and designs, due in part, to their access to thousands of glass sheets, which contained endless variations of color and opacity.

Understanding Glassmaking and Materials

What's in glass?

- Silica (most commonly sand)
- Soda (Sodium carbonate) or potash (Potassium carbonate)
- Lime

When mixed, these three primary materials create what's called a "batch." Color is usually achieved through the addition of metallic oxides. For example, the addition of iron produces a green color, while iron and sulfur combined, yield more rusty-brown hues.

Blown Glass

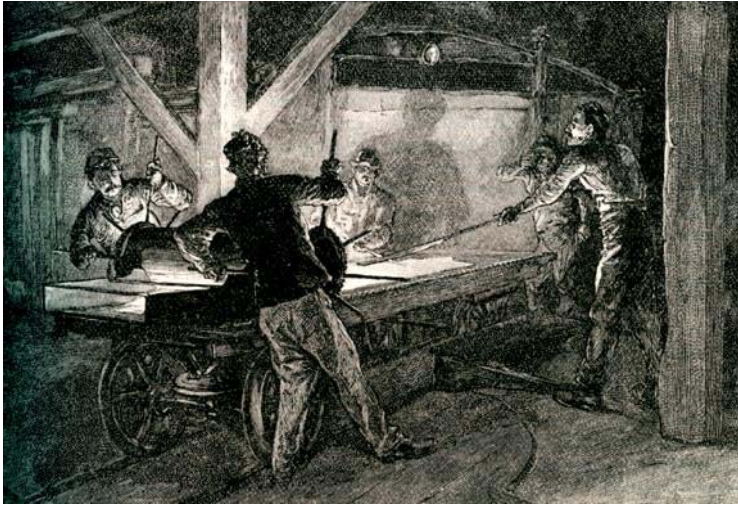
Glass blowing requires the efforts of several individuals, known as a "shop," which is headed up by a "gaffer." A glass batch is heated to over 2,000° Fahrenheit, allowing the molten glass to be shaped and formed using a metal blowpipe. Using the long, hollow, rod along with other tools, the glass is expanded and manipulated into



Louis Comfort Tiffany, *Blue Favrile Diatrete Vase*, 1909, blown glass

its desired shape. Once a basic form is achieved, the glass is transferred to a “pontil” – a long metal, solid rod – where design details can be sculpted. Finally, the glass must be cooled in an “annealing oven,” which slowly lowers the temperature of the glass ensuring the stability of the material to avoid cracks or breaking later on.

Sheet Glass

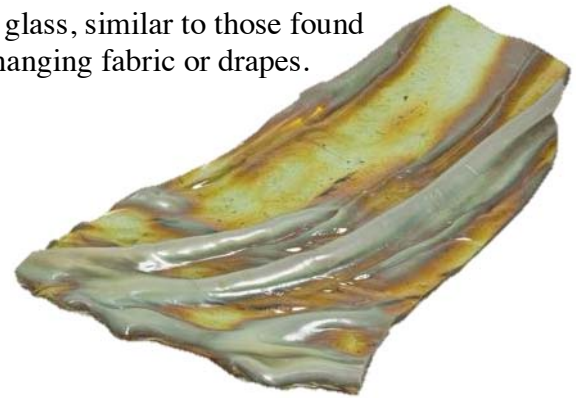


Molten glass is ladled from a furnace by hand and carried to a large metal rolling table where it is poured and spread out by a “tableman.” The glass is then rolled out, similar to rolling out dough using a rolling pin, to create a level, even surface, which is then transferred to an annealing oven to cool and stabilize.

Types of Glass Used by Tiffany

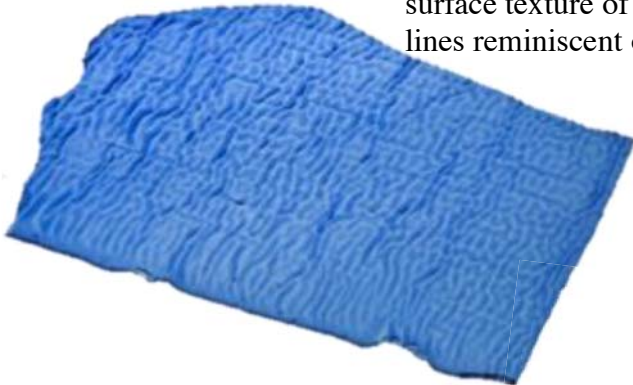
Drapery Glass

Characterized by a distinct series of folds on the surface of the glass, similar to those found in hanging fabric or drapes.



Ripple Glass

Identified by its irregular surface texture of dense, linear lines reminiscent of waves.



Streaky Glass

Multi-colored glass that has the appearance of swirling and blending of colors as if created with a paintbrush, which is created by pouring layers of molten glass on top of one another and mixing them with tools on a rolling table.

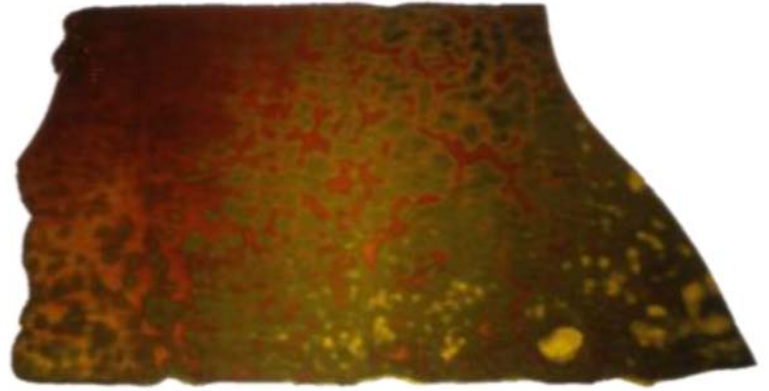


Foliage or Confetti Glass

Achieved by pouring molten glass on top of pieces of colored glass or by sprinkling small shards of colored glass onto a molten sheet to create flakes of bright color.

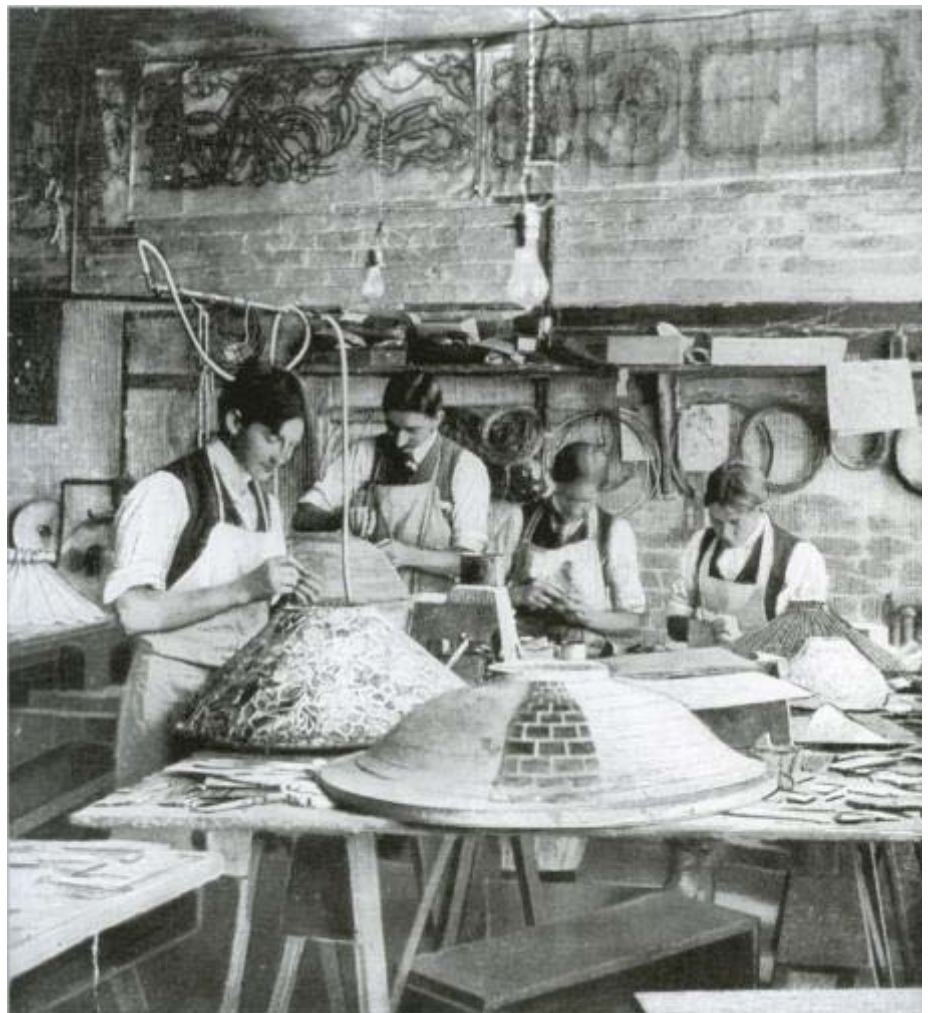
Jewels

Small pieces of glass that have been cut and faceted or pressed in a mold to create colorful geometric, gem-like shapes, which are commonly used as accents in stained-glass pieces.



Spotted Glass

Opalescent glass with a pattern similar to spots or small rings of varying opacity, which are created through localized, heat application creating patterns of crystalized growth.



Before (or After) Your Visit

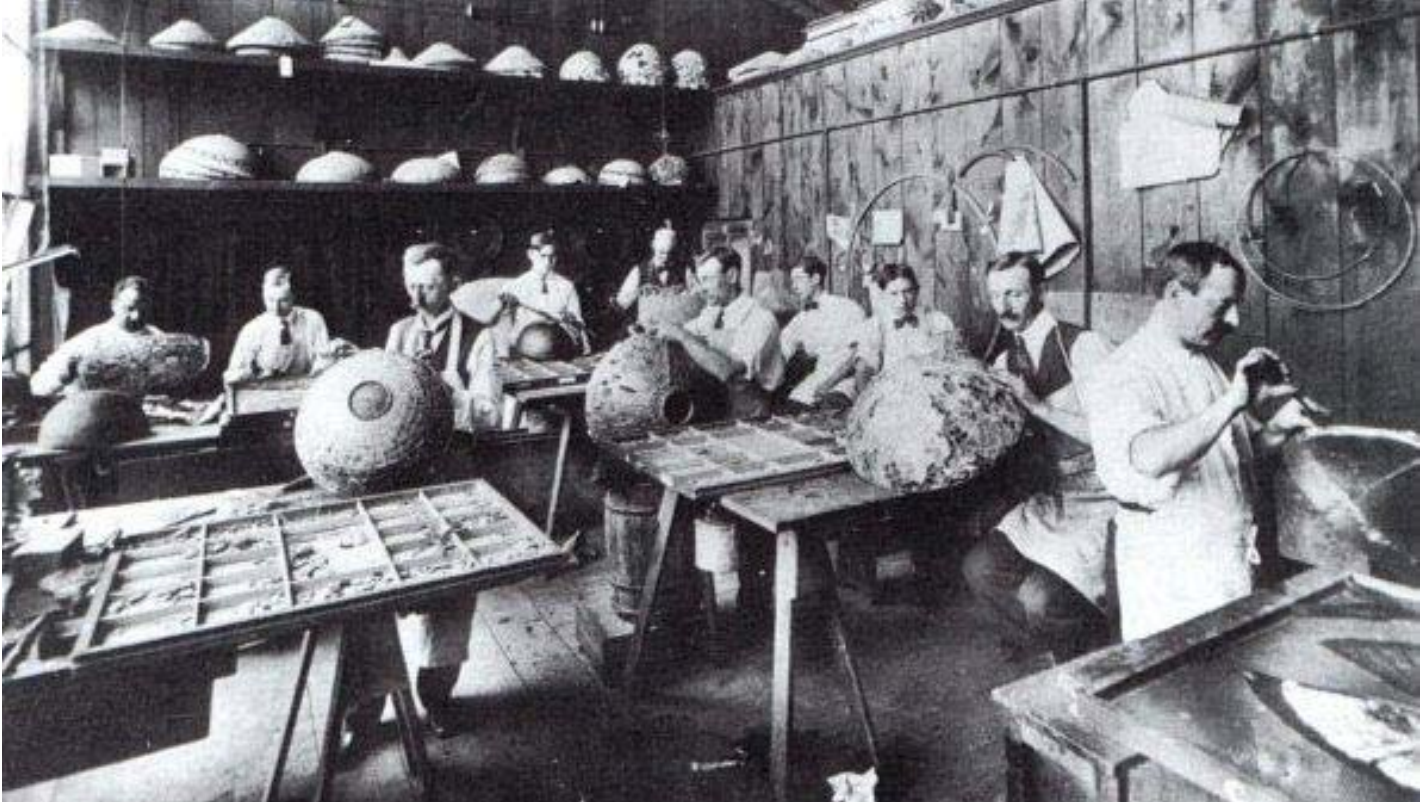
Get students thinking about the artworks on view at the Woodson Art Museum by using these exercises in the classroom, inviting critical response and creative art making.

Made in the Shade

Working in groups, challenge students to design their own lampshade inspired by the glass patterns, designs, and forms of Tiffany Studios lamps.

- One group of students will be the **glassmakers**, who create colorful, abstract sheets of paper using watercolor or craft paint, which represent enticing sheets of opalescent glass.

- Another group will serve as **designers** and sketch a rough design for a lamp (base and shade), inspired by a subject found in nature, offering a suggested palette of colors for the piece.



- A third group will function as **glass selectors** and determine which sheets of handmade glass (paper) will be used to achieve the stained-glass lamp design.
- Finally, working as a larger group, student artisans will cut and collage the glass over the lamp design.

Leaded-glass Lampshade Production at Tiffany Studios

Leaded-glass lampshades produced at the Tiffany Studios were directed by the need for consistency and quality control, ensuring that customers ordering their lavish lamps received what their money had purchased.

Designs began with color sketches on paper, which were shared and reviewed with department heads and Mr. Tiffany. Once a concept was approved, the drawing was copied and transferred onto a plaster mold in the shape of the shade. The plaster mold was painted using watercolors to represent the design in three dimensions, which was again, reviewed for approval.

Next, the design was transcribed onto a wooden form so that patterns for each individual piece of glass that made up the shade could be created.



Tiffany Studios, New York, *Poinsettia Border Library Lamp*, ca. 1905, leaded glass, bronze

The lampshade pattern was crafted first in brass, which could be used multiple times as a guide when the lamp was purchased again in the future. Before the shade could be assembled, a brass ring was affixed to the top of the wooden mold to serve as an aperture.

Each piece of glass was cut to fit its location in the brass pattern and then individually wrapped in copper foil edging. The wrapped pieces of glass were positioned and carefully nailed onto the mold in place before being soldered – first at the top to the aperture ring and then to one another as you moved down the shade.



Once the glass pieces were soldered to one another throughout the shade, it was removed from the wooden form and an additional brass ring was added to the bottom edge of the shade to stabilize it. The shade was then soldered on the inside and “beaded” on the outside. “Beading” is a more durable application of solder, which reinforces and rounds out previous solder lines, protecting the copper-foil edges of the glass.

Education model of wooden shade mold and lamp shade assembly, courtesy of The Neustadt Collection and on view in *Tiffany Glass*.

Finally, a patina was applied to the solder lines of the shade to alter their colors to more appealing hues, which didn’t detract from the leaded-glass shade.

What Do You See?

Often drawing inspiration from subjects in nature and the organic forms found in plant life, glass artists reinterpreted these subjects in a variety of ways, some designs were more representational and others more abstract. Are the images of the artworks below reminiscent of any shapes or patterns seen in nature?



Louis Comfort Tiffany, *Opalescent and Blue Favrite Vase*, ca. 1900, blown glass and two *Victorian Art Glass Baskets*.

Now You Try

Insects, flowers, trees, and the changing seasons were design motifs used by Tiffany in many of his stained-glass windows and shades. Select a favorite subject and try reimagining it in stained glass, then sketch your design, paying attention to how variations in color and form could be achieved in opalescent glass. See examples of Tiffany Studios depictions of dragonflies below.



Tiffany Studios, New York, *Dragonfly Hanging Shade*, ca. 1905, leaded glass, bronze



Tiffany Studios, New York, shade designed by Clara Driscoll, *Dragonfly Reading Lamp*, ca. 1899, leaded glass with metal filigree, bronze



@ the Woodson

During their docent-led Experience at the Art Museum, students will explore Tiffany Glass: Painting with Color and Light, discuss artworks in the galleries, and have an opportunity to create an original artwork inspired by works on view. Students in Pre-K through 2nd grade will color a Tiffany-inspired design on a clear transparency, affixed with a holder and string for hanging (see sample at left). Students in grades three through twelve will use a similar

hanging transparency to create their own stained glass design using Sharpie markers and cotton swabs to blend and mix colors as seen in Tiffany's opalescent glass (see samples at right).

Activity Guides

Each participant on a docent-led Experience receives an [Activity Guide](#) to extend learning and enrichment beyond the Woodson Art Museum and as a way to share the visit with friends and family.

Woodson Art Museum Information

Please encourage your students to visit the Museum again.

Hours:

Tuesday – Friday	9 am – 4 pm
First Thursday of every month	9 am – 7:30 pm
Saturday – Sunday	Noon – 5 pm

Closed Monday and holidays, including Christmas Eve, Christmas Day, and New Year's Day

Contact:

Call the Woodson Art Museum or visit the website for more information:

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