Biology Department
Poster Presentation Guidelines and Thesis Deadlines

The attached pages provide some information on how to present your thesis research in a poster format. Although the department has agreed on these guidelines, you should also consult with your thesis advisor about poster preparation and design.

Keep the following timetable for the thesis and poster presentations in mind!

This week: Sign up in advance for an appointment to print on the large format plotter from this web page: http://oit.williams.edu/mec/plotter-reservations/. Each appointment reserves a 30 minute slot and your poster should be ready to print when you arrive for the appointment. Due to the high number of posters being printed, if you miss your appointment you will need to reschedule by making a new appointment via the sign-up page.

Thursday, May 2: Poster mounted in designated location in the TBL lobby by 8:00 am.

Friday, May 3: Formal poster session in the TBL lobby, 1:00-2:30. Your attendance at the poster session for the entire time is required. You should be prepared to spend at least 45 minutes during this period standing by your poster ready to explain the salient features of your research and to answer questions.

Monday, May 6: Give your completed thesis to the assigned second reader (the list is below).

Monday, May 13: The second reader will return your thesis with comments and suggestions. You should go over these comments and suggestions and incorporate them (along with any additional comments and suggestions from your advisor) into the final version of the thesis.

Friday, May 17: Final thesis submitted to advisor.

Monday, May 20: Final deadline for submitting the thesis to the Sawyer Library. Three copies are required (one for the college archives, one for the Schow library, and one for the Biology Department). Guidelines for printing your thesis can be found at http://archives.williams.edu/theses/guidelines.php. You are encouraged to submit additional copies; you will surely want one, as will your advisor, and one for your parents is also recommended. The department has acid free college seal bond paper for you to use for printing the college archive copy of your thesis (see Dawn Jamros).

Please also submit a copy of your abstract and title to drj1@williams.edu in the Bio Office for inclusion in the Report of Science at Williams.

IMPORTANT NOTE: A point about thesis formatting that many honors students discover only at the last minute: the LEFT margin of all pages must be 1 1/2 inches. This is much wider than normal, and restricts your figure widths. The reason is that the extra half-inch is needed for binding the thesis.

<table>
<thead>
<tr>
<th>Name</th>
<th>Honors Adv</th>
<th>2nd Reader</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abigail Davies</td>
<td>Banta</td>
<td>DeWitt</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Connor Dempsey</td>
<td>Banta</td>
<td>Edwards</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Eric Dietsche</td>
<td>Sandstrom</td>
<td>Marvin</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Laura Donnelly</td>
<td>Savage</td>
<td>Altschuler</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Devon Drew</td>
<td>Gehring</td>
<td>Dean</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Kate Dusenbury</td>
<td>Ting</td>
<td>Smith</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Elizabeth Hwang</td>
<td>Banta</td>
<td>Ting</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Ryan Jenks</td>
<td>Maroja</td>
<td>Savage</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Yiqin Jiang</td>
<td>Lebestky</td>
<td>Williams</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Brian Kirchner</td>
<td>Lebestky</td>
<td>Marvin</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Carrie Tribble</td>
<td>Maroja</td>
<td>Edwards</td>
<td>1:00-1:45</td>
</tr>
<tr>
<td>Emily Whicker</td>
<td>Altschuler</td>
<td>Savage</td>
<td>1:00-1:45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Honors Adv</th>
<th>2nd Reader</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace LaPier</td>
<td>Altschuler</td>
<td>Banta</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Geordie Lonza</td>
<td>Raymond</td>
<td>Lynch</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Nicole Lou</td>
<td>Williams</td>
<td>Lebestky</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Rebecca Maher</td>
<td>Swoap</td>
<td>Morales</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Stan Monfront</td>
<td>Maroja</td>
<td>Smith</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Uttara Partap</td>
<td>Swoap</td>
<td>Dean</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Sarah Rowe</td>
<td>Art</td>
<td>Ting</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Christine Schindler</td>
<td>Swoap</td>
<td>Lynch</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Rebecca Shoer</td>
<td>Williams</td>
<td>Morales</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Gordon Smith</td>
<td>Edwards</td>
<td>Smith</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Marissa Thiel</td>
<td>Lynch</td>
<td>Dean</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Chalita Washington</td>
<td>Raymond</td>
<td>Lynch</td>
<td>1:45-2:30</td>
</tr>
<tr>
<td>Jonathan Wosen</td>
<td>Marvin</td>
<td>Morales</td>
<td>1:45-2:30</td>
</tr>
</tbody>
</table>

Department Chair: Steve Swoap • biology.williams.edu • www.facebook.com/wcbiology
Preparing the poster

We are somewhat reluctant to give detailed instructions for preparing posters because we do not want to suppress your creativity. Nevertheless, we do think that some guidelines, recommendations and advice may help some of you prepare a higher-quality poster. Some basic points to consider:

- The poster should be a **succinct, clear and self-explanatory** presentation of your written thesis.
- Posters allow you to present your work in a very concise form, in which the **visual** aspect is most important.
- Do not overload your tables and figures with too much information: try to communicate central ideas, not details of your data.
- The poster should be self-explanatory and should also communicate in the absence of the author.
- Try out your poster (the parts and the whole) on your fellow students as well as your advisor.

The layout of the poster

The main sections of a poster are:

**Title/Header:** An informative and not too wordy title (in 72 point letters), your name, and the lab you worked in (you might wish to put your picture here, too)

**Introduction:** Lay out the main problem or hypothesis you studied in your thesis. You may wish to refer briefly to previous work.

**Methods:** Give your general strategy and a short summary of your experimental approach. This section should not be extensive and might be entirely included in the figure legends within the results section.

**Results:** Present your main findings using figures and tables. Do not overload tables and graphs with data, and remember that people visiting your poster won't remember details - make sure to emphasize the important points!

**Discussion/conclusions:** Draw conclusions about what you have learned from your work. Indicate the significance of your conclusion(s) - with an emphasis on what's new.

**References:** Keep this short - no more than about 5 references.

**Acknowledgements**, if any

---

**this is a 14 point font**

**this line is 1 point thick:**

- Use a **minimum** font size of 14 points and a minimum line thickness of 1 point. Text must be readable from a distance of 4 feet.
- Each section in the poster should be clearly marked with a title.
- When you arrange individual sections you should place them in columns rather than in rows so that people don't have to zig-zag back and forth to read your poster.
- Figures and tables should be clearly numbered in sequence; each figure/table should have a heading in large type that states the "take-home" message; detailed information can be placed in the figure legend in smaller type.
- All tables and figures should have a caption and the axes of graphs must be clearly labelled.
- In a table, try to restrict yourself to 4 columns with not more than four listings per column.
- Figures should show a maximum of 3 curves.
- The amount of text is limited, so choose your words carefully.
- Use colors for emphasis and distinction.
- **Please avoid filling the entire background of the poster with dense color since it wastes toner and increases the cost of production.**

The total size of the poster should be no more than 3 1/2 feet in any dimension.
To print the poster, you have two main options.

1. **Printing individual panels and mounting them on posterboard.** This is less likely to run into snags and easier to do at the last minute; if done well, the results can be very good, but if you don’t take care, posters prepared this way can look like grade school efforts. If you choose this option, individual parts of your poster should be mounted on thin, colored poster paper or cardboard. You may want to group logically consistent sections of the poster on backgrounds of similar color. You are expected to supply your own poster board; the department will provide tape and other materials needed for mounting your display.

2. **Preparing the entire poster electronically and printing it on a single sheet** using the large ink-jet plotter in Jesup 316. This method works well if you prepare your poster at some time other than the last minute, and generally comes out looking very nice (however, you should be aware that the inks used fade rapidly in sunlight). If you plan to use this method, you should prepare your poster using Adobe InDesign, an easy program to learn and use (see attached sheet). Although it is possible to use other programs, InDesign works best for printing on the plotter, as other programs can fail to print properly (PowerPoint is particularly bad, and figures made in ChemDraw are also problematic). You should sign up to print your poster about 2 weeks ahead of the date you plan to print it (this is important because each poster takes about 1 hour to print). Like most ink-jet printers, the large format printer used for printing the posters uses inks that are water-soluble; if you print your poster on a rainy day, take a trash bag with you to protect your poster when you leave Jesup.

---

**Intro to InDesign and Producing Posters**

*a compiled from worksheets prepared by Sharron Macklin*

*x4318 smacklin@williams.edu*

Adobe InDesign™ is a powerful desktop publishing program. With it you can create documents of many types, from single page advertisements and flyers, to complex multi-page publications. This sheet summarizes the basics of creating documents with InDesign. First, download the program to your own Mac or PC from: [http://www.williams.edu/resources/oit/software/publishing.shtml](http://www.williams.edu/resources/oit/software/publishing.shtml)

**Getting Started**

Before opening a new document page, go to Preferences under Edit in the Menu bar. Under Preferences, click on General and work through setting your “preferences” in the windows clicking “next” until you come back to General. Set image display to full resolution. In the Units & Increments window you will likely prefer having your ruler units in inches or centimeters rather than picas. Look at the options in each window, but you may not want to change the rest at this time.

Under File on the Menu bar, open a new document. Indicate the paper size and orientation for your one-page poster (one of the dimensions must ≤ 36 inches if you plan to print your poster on the Jesup Media Lab plotter). Don’t forget to size your margins (a minumum of 0.5" on each side; 1" to 1.25" is recommended) and set the number of columns you will want as well as the gutter (the distance between columns.) As your page appears, if you don’t like your setup, go back to document setup and make changes. In View, try turning background grids, columns and other features on and off to learn how to control them.

**Placing a Graphic**

When using InDesign, you “Place” rather than import. Objects can be placed inside an existing frame (box) or a box can be drawn to locate the object once you have indicated that you wish to place it. If you have an existing frame with an object in it activated, the place command will replace the old object with the new. Only one object can occupy a frame at a time unless they have been grouped together as a single object. If you replaced your image unintentionally, you can undo the damage by pressing Ctrl+Z (Windows) or Command+Z (Mac). For best results, prepare your graphics in another program, save them as JPEGs with a resolution of 150 to 200 ppi, and then place the graphics into the InDesign document.
Clipping Paths
The image you just placed has a white background that limits where you can use it with a pleasing effect. It would be more useful if we could “cut” around the object and have no background.

With the object frame active, go to Object on the Menu bar and click on Clipping Path. Change the Type: to Detect Edges but don’t change other settings. Move the sculpture image over a colored background if it is in a white area. Note that while the frame size didn’t change, the white background is no longer visible.

Stacking Objects
Sometimes you would like to create interesting effects by stacking several objects on top of one another. Objects will stack in the order that they were created. This order can be changed by activating the frame of an object you want to move and going to the Arrange menu under Object on the Menu bar. “Send backward” will move the object backward one object in the stack. “Send to Back” will move the object to the bottom of the pile.

Cropping and Masking
If you want to hide part of an image, this may be done by cropping or masking it with its own frame or with an empty frame. From the tool bar, select the black selection tool (arrow) and click on an object you would like to mask with its frame. By holding the shift key down while dragging on any of the handles (little squares) you can re-size the frame without re-sizing the object to cut off or mask portions of it.

The other approach to masking or cropping is to create an empty frame to cover part of the object. First, from View on the Menu bar click Show Frame Edges so that you can see what you are working on (note that all the edges are on now). Next, go to the Tool bar and select the Ellipse Frame tool.

In an empty white area draw an ellipse about an inch wide. Note that the frame box is rectangular. If the central ellipse area is a solid color, go to the Tool bar and click on the white square with a red line at the bottom to make it empty (transparent.)

Now switch to the Direct-Selection tool (white arrow) to select the object to be mask and type Ctrl+C, then select the frame that will be the mask (click on it to make it active.) Type Ctrl+Alt+V to place the object into the frame. Alternately, you can find these commands under Edit on the Menu bar. The cropped or masked objects can be moved anywhere on your page.

Modifying Frame Shapes for Masking
Frame shape can be altered by moving, adding or deleting anchor points to create a new shape. Find a frame that you would like to modify and click on the frame using the Direct-Selection tool (white arrow.) By clicking and dragging a handle, you can move the position of an anchor.

If you need to add additional anchors to create your shape, switch to the Add Anchor Point tool that looks like an old fashioned pen point with a plus sign to one side. Add anchors where you need them by clicking on the line with the pen point. If you need to delete an anchor, select the Delete Anchor Point tool (pen nib with a minus sign) and click on handles to delete them. Switch back to the Direct-Selection tool to continue moving your anchors around until you get the desired effect.

Adding Text
Text may be directly typed onto your document in the same way as PhotoShop using the Text tool (T on the tool bar), adjusting type, size, etc. from the character control palette. Don’t forget that you can change the color of the type at the Tool bar.

Alternately, you can bring in a text file by using the Place command. Draw a box in which to place your text. The Selection tool will permit you to move or resize the text box.

Detailed information on wrapping your text around the graphics or inside the graphic is available from the program’s Help section and the User Guide.

About Masters
If you would like to maintain a specific design from project to project, you will benefit from learning to work with Masters (templates). For further information on this topic check the help section on your Menu bar. Detailed instructions are included for creating Masters, using Masters and creating new masters from old ones.