

Library Hours: “Let’s build a simple widget” (LOL)

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OUR OLD SYSTEM:

1. “Today’s Library Hours” was displayed on **3 different servers, 3 different platforms** via date/day Javascript

- **Drupal** (main library site) (.php) <http://www.geneseo.edu/library>
- **Information Delivery Services** (Illiad server, .asp .NET) <https://illiad.geneseo.edu/>
- **Serial Solutions**- account on journal server <http://fb7hk6nl8u.search.serialssolutions.com/>

2. **Additional node in Drupal** displaying ranges of Library Hours, closings, holidays, extended hours, other exceptions <http://www.geneseo.edu/library/library-hours>

REALLY ANNOYING PROBLEMS:

1. A librarian(or librarians) had to manually enter library hours **EVERY SINGLE DAY** into **3 different areas**
2. A librarian also had to manually enter date ranges into the Drupal node; often ranges were not strictly by week, not formatted correctly

CHALLENGES:

- Scripts must be secure **yet work across multiple domains**
- Output must be viewable on mobile devices and all (old) browsers

HMMM....WHY DIDN'T WE JUST USE GOOGLE CALENDAR API?

- Too many restrictions with using on multiple domains
- Difficult to style and display custom views and formats

SOLUTION:

A. Build database (MySQL):

- Table of date range rows listing regular library hours start date end date ,start and end times for each day of week, semester/term
 - If there are multiple weeks with the same hours, this can be all in one row
- Table of Exceptions: exception start date, end date, exception start time, end time, exception description. If the date is CLOSED, that is entered and start/end time is null.
- User can enter unlimited ranges; a whole years' worth or multiple years' worth of Library Hours

B. Webservice Scripts (PHP)

1. Shows range of dates for Library Hours limited to 90 days from current date

- Queries range of dates limited to 90 days from current date
- Queries exceptions within 90 day range
- Returns JSONP feed of Day, Date, Start time,End time, exceptions–
 - if the date has an exception, the exception start time, end times, and description are displayed instead.
 - If the library is closed on that date, CLOSED is displayed instead, along with any description

2. Show current Day/Date Library Hours

- Queries range of dates and matches to current date (server time)
- Queries for any exceptions
- Returns JSONP feed of Current Day, Date, start time, endtime
 - if the date has an exception, the exception start time, end times, and description are displayed instead.
 - If the library is closed on that date, CLOSED is displayed instead.

3. Return any specific date

- User enters url string in browser and adds specific date
- Script queries range of dates and matches to date specified in browser
- Script queries for any exceptions
- Returns JSONP feed of specified Day, Date, start time, endtime

- if the date has an exception, the exception start time, end times, and description are displayed instead.
- If the library is closed on that date, CLOSED is displayed instead.

4. Whole years' worth of date ranges and hours

- Queries range of dates limited to 365 days from current date
- Queries exceptions within 365 day range
- Returns JSONP feed of Day, Date, Start time, End time, exceptions–
 - if the date has an exception, the exception start time, end times, and description are displayed instead.
 - If the library is closed on that date, CLOSED is displayed instead, along with any description

C. Javascript which parses JSONP feeds from each PHP script

D. SINGLE LINE Javascript tag pointing to location of javascript, which is placed in proper location of each site that needs it

E. Additional Javascript -- in Drupal node calling "90 days" JSONP feed

- This displays "Extended Hours" by date ranges, listing exceptions and closings.
- Has stylesheet for highlighting exceptions and closings

All scripts use regex and various methods to prevent cross site script attacks, sql injections, etc

SUMMARY/HUMOR:

- This project started out as a 'simple' widget idea
- All our elaborate backend coding allows for just ONE line script tag to be placed on any site where we want to show "Today's Library Hours"
- Despite all our elaborate backend coding, everything looks the same to anyone visiting SUNY Geneseo websites.
- Most importantly, to the librarians who no longer have to enter library hours every single day, all our backend coding is a blessing!!

FUTURE PLANS:

- Build a friendly administrative interface so whomever librarian is designated 'calendar updater' will be able to:
 - Securely log in, see a 'datagrid' of dates, times, exceptions
 - Add, edit, delete records as needed
 - Query a specific date or range of dates
 - Do all these tasks without having to access the database directly
- Add "Library Hours" to additional SUNY Geneseo related sites
- Make styling consistent for all sites and all browsers
- Make code available for others to use; make it easy to set up 😊

SUNY GENESEO Milne Library (Drupal) <http://www.geneseo.edu/library>

www.geneseo.edu/library

 **MILNE** Library
State University of New York at Geneseo

GENESEO

Google™ Custom Search Site Search

Find Books & Media Find Articles Requests & Services Research Help About Milne Library

Milne Library › Welcome

QUICKSEARCH

In Milne Beyond Milne Journals

 **glocat+**
RESEARCH MADE EASY

Find Books, Media and Articles in Milne Search

Advanced Search | Go to GLOCAT Classic

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POPULAR SUBJECT GUIDES

- » Biology
- » Business and Economics
- » Chemistry
- » Country, State and City
- » Education (lesson planning resources)
- » Geosciences
- » History

POPULAR RESOURCES

- » Academic Search Complete
- » ERIC
- » GLOCAT Classic
- » JSTOR
- » Lexis-Nexis Academic
- » MLA
- » ProQuest
- » Psycinfo
- » Rosetta Stone

QUICK LINKS

- » [Milne Center for Academic Excellence \(CAE\)](#)
- » [Renew your books](#)
- » [Classes/Events schedule](#)
- » [Library workshops](#)
- » [How do I...](#)

SUNY GENESEO Milne Library: Schedule of Library Hours page (Drupal node)
<http://www.geneseo.edu/library/library-hours>

www.geneseo.edu/library/library-hours

MILNE Library
State University of New York at Geneseo

GENESEO

Google™ Custom Search Site Search

Find Books & Media Find Articles Requests & Services Research Help About Milne Library

Milne Library > About Milne Library > Library Hours

October 16 - November 26

Monday - Thursday	7:30 AM - 1:00 AM
Friday	7:30 AM - 9:00 PM
Saturday	10:00 AM - 9:00 PM
Sunday	10:00 AM - 1:00 AM

November 27 - December 1

- **CLOSED - Thanksgiving Day :** Thursday, November 28
- **CLOSED - Thanksgiving Break :** Friday, November 29
Saturday, November 30
- **Thanksgiving Break :** Sunday, December 1 (12:00 PM - 1:00 AM)

Monday - Thursday	7:30 AM - 1:00 AM
Friday	7:30 AM - 9:00 PM
Saturday	10:00 AM - 9:00 PM
Sunday	10:00 AM - 1:00 AM

December 2 - December 10

Monday - Thursday	7:30 AM - 1:00 AM
Friday	7:30 AM - 9:00 PM
Saturday	10:00 AM - 9:00 PM
Sunday	10:00 AM - 1:00 AM

Sat, November 9, 2013
Today's library hours:
10:00 AM to 9:00 PM

View Reference Calendar

IM a Librarian
ONLINE

Support Milne Library

- » Friends of Milne
- » Make a Gift
- » Donate Materials


Connect w/ Milne

- Facebook
- Twitter
- Flickr
- WordPress

SUNY GENESEO IDS (Information Delivery Services)


(Illiad Server, ASP .NET based) <https://illiad.geneseo.edu/>

Browser address bar: <https://illiad.geneseo.edu>



MILNE Library

State University of New York at Geneseo



Google™ Custom Search

[Find Books & Media](#) | [Find Articles](#) | [Requests & Services](#) | [Research Help](#) | [About Milne Library](#)

Milne Library > Information Delivery Services

Information Delivery Services (IDS)

Need a book, media item, or journal article? Request it through IDS and we'll deliver it to you.

SIGN INTO YOUR IDS ACCOUNT

Username

Password

| Or use [Geneseo Single Sign On](#).

ACCESS YOUR IDS ACCOUNT TO...

- Place a new request
- Check the status of a request
- Renew your IDS materials
- Download delivered articles
- Update your contact information
- And more...

ANNOUNCEMENTS

Requesting your textbooks through IDS?

Milne Library has greatly expanded its Textbook Reserve program. This means that a larger number of your textbooks are available at the Service Desk for 4-hour loans, allowing as many students as possible to benefit from this collection.

Although we understand your need to have a textbook for the entire semester, **please note that IDS will not borrow a copy of items on Textbook Reserve from other libraries.** This is due to our agreement with other libraries to not request materials that we already have available.

Please also note the following:

Sat, November 9, 2013
Today's library hours:
10:00 AM to 9:00 PM

IDS Office
Milne Service Desk
585-245-5589
ids@geneseo.edu

Semester Hours
M-Th: 8am-10pm
Fri: 8am-4pm
Sat: Closed
Sun: 2pm-10pm

[View Reference Calendar](#)

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Connect w/ Milne

SUNY GENESEO Serial Solutions

Serial Solutions journal server <http://fb7hk6nl8u.search.serialssolutions.com/>

The screenshot shows a web browser window with the address bar displaying `fb7hk6nl8u.search.serialssolutions.com`. The page header features the **MILNE Library** logo (State University of New York at Geneseo) and the **GENESEO** logo. Search options include "Google Custom Search" and "Site Search". A navigation menu contains: **Find Books & Media**, **Find Articles**, **Requests & Services**, **Research Help**, and **About Milne Library**.

Journal Finder

Sat, November 9, 2013
Today's library hours:
10:00 AM to 9:00 PM

IM a Librarian OFFLINE
a Librarian Chat is Closed.
See additional options.

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- » Donate Materials

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Find journals by title or ISSN

Title begins with

Browse journals by title

0-9 A B C D E F G H I J K L M N O P Q R S T U V W X Y Z Other

Browse journals by subject

-- Please select a subject category --

Search for keywords in e-resources

-- Please select a database --