



# Study Abroad Course Transfer Database

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## INTRODUCTION

The UNH Education Abroad Office supports undergraduates to study, intern, and do research abroad. In this project, we have improved the advising process by developing an online database tool. The web-faced database will help advisors and students search for Discovery courses that have been evaluated for transfer credit from UNH-approved and exchange study abroad programs. Students of different UNH majors can take the Discovery courses abroad and benefit by using this database in their planning process.

## PROBLEM/ REQUIREMENT

- The UNH Education Abroad Office and Registrar's Office currently use spreadsheets to track study abroad course equivalencies for Discovery courses. These spreadsheets are only accessible by Education Abroad office staff and the Registrar's office. Education Abroad staff must copy and paste information from the spreadsheets to send to students during the advising process. This is time-consuming and repetitive. Academic advisors across the colleges don't currently have access to the spreadsheets.
- The client requested for us to implement a more user-friendly and efficient way to manage the spreadsheet data so that the information is public-facing on the Education Abroad website. The Registrar's office will maintain control of study abroad course evaluations by updating the online database

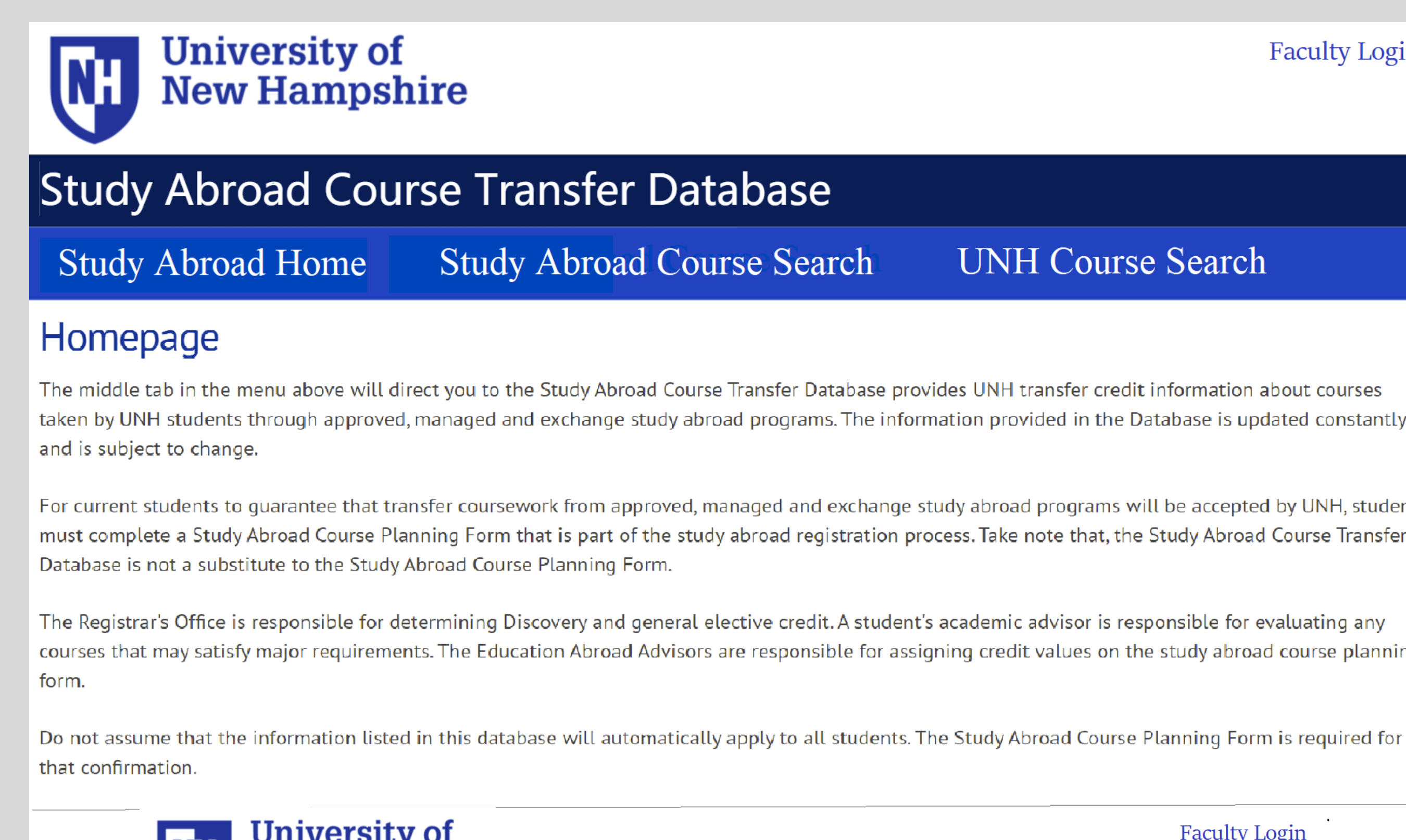
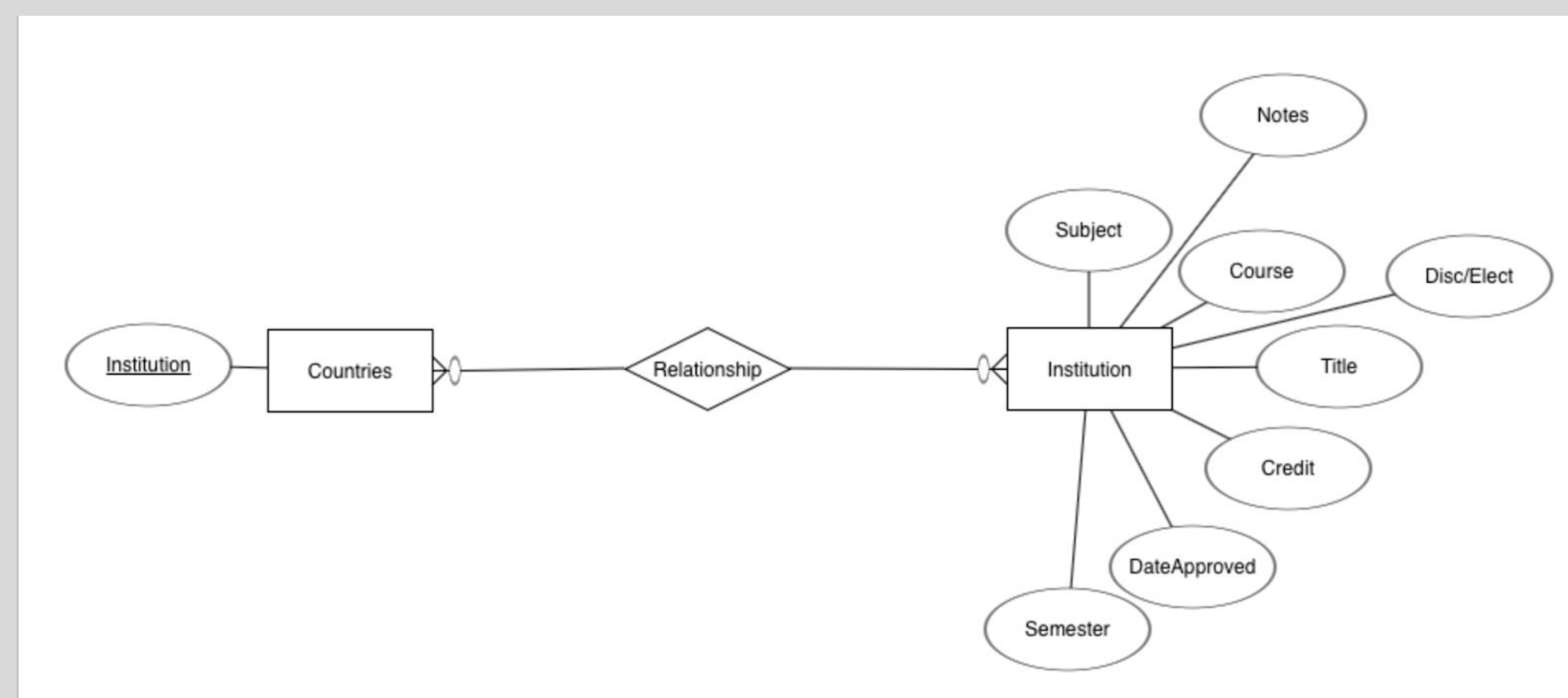
## GOALS

- Create a study abroad advising tool that is simple, efficient, and easily accessible on the Education Abroad website.
- Stay in compliance with UNH web guidelines so that the database can be transitioned to the EA website and become fully operational.
- Work closely with the client to meet their requests at the same time collaborating with UNH technology for advice about using Drupal for the EA Website.
- Create a training manual for the Registrar's office so that the database can be easily updated over time.

## CREDITS & ACKNOWLEDGEMENTS

Our group would like to thank Catherine, Laura, and Eric for sponsoring this project and guiding our project team during the Study Abroad Course Transfer Database's development. We would also like to thank TeamDynamix and IT support, Scott and Gina for constantly helping us out with setup and permissions throughout the development process.

## DESIGN & OUTPUT



University of New Hampshire Faculty Login

Study Abroad Course Transfer Database

Study Abroad Home Study Abroad Course Search UNH Course Search

Study Abroad Course Transfer Database

Search by Country: Czech republic | Search by Institution: Charles university | Search by Discovery/Elective: FPA | Apply

Institution	Subject	Course	Title	Credit	Semester	Disc/Elect	Date Reviewed
Czech Republic	Charles University	ART 301	Czech Art & Architecture	3	Semester	FPA	
Czech Republic	Charles University	ART 304	Music and Modern Thought: Music between a Universal Language and Local Culture	3	January	FPA	4/10/19 LU
Czech Republic	Charles University	ART 321	Art Photo & Genius Loci	3	Semester	FPA	
Czech Republic	Charles University	ART 322	Art Photography and Genius Loci	3	Semester	FPA	
Czech Republic	Charles University	ART 323	Alternative Culture	3	Summer	FPA	10/16/19 LU

As you can see in the image above, the top navigation bars have the necessary tabs to navigate to useful resources. Users will be able to search the database through search criteria (Country, Institution & Disc/Elect). This then outputs the list of courses as you can see in the image. Faculty can also log in and add/edit courses in the database.

## TESTING & MAINTENANCE

- Manual functional testing will be performed on the website where actual system usage is simulated to check if the system behaves as it is supposed to and if all major requirements are covered. Additionally, a SimpleTest module: Drupal's custom testing framework will be installed as it helps to perform automated functional testing by creating series of tests and assertions appropriate to the site.
- This Drupal v7 website will be handed over to TeamDynamix and they will update the website to Drupal v9 and host it on the Global site and maintain it from there.

## IMPLEMENTATION

- An open-source CMS and a web development framework named Drupal was used to set up and deploy the web application for the front-end users to view and access. Appropriate APIs, Modules, and custom plugins were installed to make direct changes to the Drupal website as an administrator. These modules such as Content Creation, Content Structure, Views creator and Search APIs helped to incorporate additional features such as search, dropdown menus, views, and so on.
- To structure the database, customized placeholders were created. Drupal calls content that will define exactly how information should be entered into the database. With the data defined properly, the Views module within Drupal was used to style the outputted data into a table format. The phpMyAdmin was used as an SQL coding environment to access our databases.
- The UNH style theme was incorporated by TeamDyanmix after showing the proof of concept.

## CONCLUSION

- The Drupal web application is hosted on the UNH server named unhsas and is available to view to the public. The students and advisors can now easily navigate the Discovery courses that have been evaluated by the Registrar's office for study abroad transfer credit. This application will serve as a model for building a major course transfer database for all UNH colleges.
- Future Goals – The project is shown to Team Dynamix as proof of concept, and they will take over to implement future goals. Another goal the team is currently focusing on is Faculty (Superusers) login to the website so that they can and view additional columns and be able to add, edit and delete courses.
- Improvements – The usage of the Drupal CMS has slowed down our progress due to a lack of resources and self-learning. Drupal should have been explored locally first instead of hosting it on the UNH server as this created a lot of dependencies and permission to work on the site. Using an alternative technology such as Flask with more resources would have helped the team to self-learn quickly provide a better-completed solution to the problem.