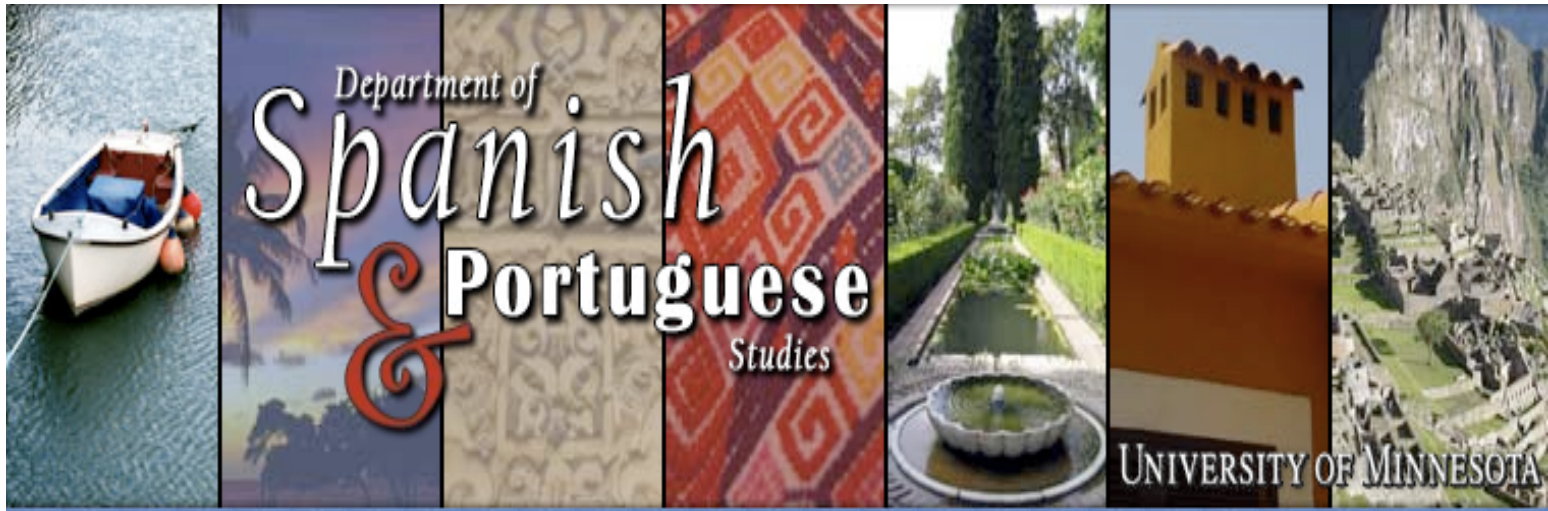




# Modeling Collaboration between Foreign Languages and Sustainability

**CLAC 2012**  
**F. Matos-Schultz**  
**Patricia Mougel**  
**Charlotte Melin**



## Modeling Collaboration Between Foreign Languages and Sustainability Studies

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CLAC 2012  
March 10, 2012

# Connections with Science

- Spanish 1022 is a first-year course for students with previous experience with Spanish
- Most are double majors within the College of Liberal Arts
- New influx of graduate students from the sciences that need the language to conduct research in a Spanish-speaking countries

# Connecting with Colleagues Across the Disciplines

## Grants

- NSF
- PIRE\*
- Sea Grant

\*Partnership for International Research and Education



## Volunteer Stream Monitoring Interactive Verification Program (VSM-IVP)

New! Use this program to verify your aquatic insect identifications!



Connecting with community of volunteers

Chironomidae Research Group  
University of Minnesota



# Connecting language learners and users with science

- Language learners
  - ✓ Exposure to new content in real- life settings
  - ✓ Fully integrated learning module for independent learning and discovery
- Scientists
  - ✓ Access to new population for “in reach” opportunities
  - ✓ Connecting with communities
  - ✓ Expanding research areas and opportunities

# Connecting learners and community

## La trucha y su hábitat

## ¿Qué es una trucha?

La trucha es un pez similar al salmón que le gusta el agua fría y clara. En Minnesota hay tres tipos:

### La trucha arco iris

*Oncorhynchus mykiss*



### La trucha marrón

*Salmo trutta morpha fario*



### La trucha de quebrada

*Salvelinus fontinalis*



Es un grupo de científicos a la Universidad de Minnesota que estudia los chironomidos, una familia de insectos. Estos insectos indican la salud del agua en quebradas en MN y el resto del mundo. El grupo quiere compartir sus investigaciones y educar la comunidad local y la comunidad científica.

Encuentre más información sobre las investigaciones y programas voluntarios de monitoreo en su sitio de web,

<http://www.entomology.umn.edu/midge/index.htm>



College of Food, Agricultural  
and Natural Resource Sciences



Introducción

Para pensar

Para explorar

Para leer

Para leer 1 cont.

Para leer 2

Para leer 2 (cont.)

Para ver, escuchar y escribir

Para terminar

# Introducción

## ¿Qué es una tertulia?

*Tertulias* are very popular in all Spanish-speaking countries. It is an informal gathering of people in a café, a bar, a plaza, a bookstore, or other types of public spaces where a group meets to chat and discuss topics of interest such as the latest news, a newly released book, politics, sports and.....



## Learning Module

- Reflection
- Exploration
- Reading
- Listening
- Writing
- Action Plan/ Engagement

Cualquier lugar es bueno para una tertulia. Solo necesitas buena compañía y un buen tema de conversación.

¿Dónde irías tú para una tertulia?

¿Hay tertulias en la comunidad universitaria? ¿dónde?

## Tertulia - La ciudad y el medioambiente

Preview

Edit

Reports

Grade Essays

1. ¿Cómo es tu relación con la naturaleza? ¿Es solidaria? ¿ocasional? ¿indiferente?

2. Describe brevemente cuál fue tu contacto más reciente con la naturaleza? ¿Cuándo? ¿Dónde?

Your answer:

### Para explorar

#### ¿Cuál es el rol de la naturaleza en Minnesota?

La naturaleza es una parte importante de la vida de los ciudadanos de Minnesota, particularmente todo lo que tiene que ver con sus famosos 10,000 lagos, quebradas (*streams, springs*) y ríos. Al pensar en los cuerpos de agua tan característicos de Minnesota, ¿qué es lo primero que se te ocurre?



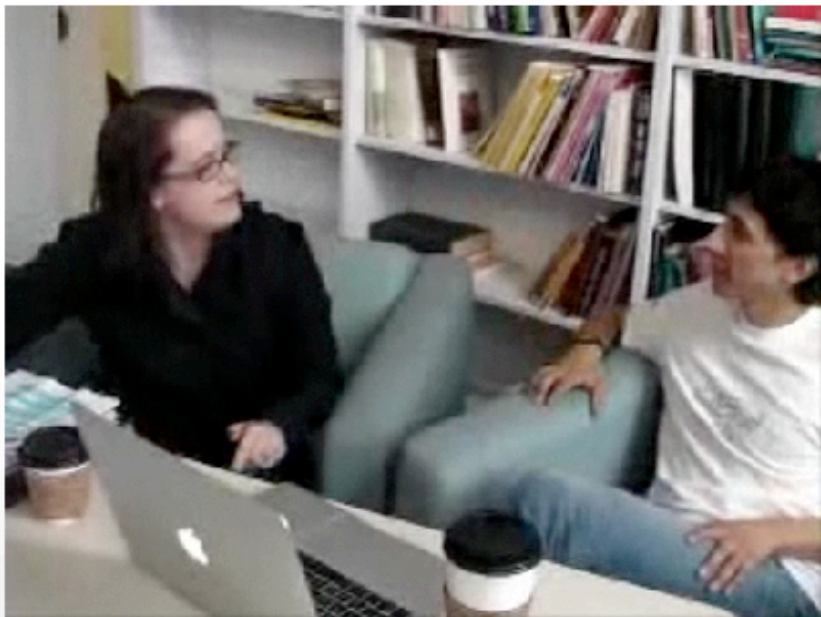
#### ¿Pensaste en las truchas (*trouts*)?

Contesta en español: ¿por qué el agua es importante en Minnesota? En tu opinión ¿qué simboliza el agua para los ciudadanos de Minnesota?



# VideoANT

Title: **Programas de monitoreo 1-24-12**



00:07/4:32

Add A Marker to the Timeline

# Para escuchar

# Para leer

To Begin Annotating:  
Click The Set Marker Button



### ¿Qué se observa?

-Las características físicas del agua: como la claridad, la velocidad, la cantidad de plantas u otros aspectos de las riberas de la quebrada, las horas de sol y sombra  
-Los químicos en el agua  
-Los niveles de contaminantes que pueden afectar y dañar a los organismos

### Colectar los bioindicadores

Un indicador biológico es un organismo, típicamente una planta o un insecto que responde a los contaminantes y condiciones en un ecosistema. Estos organismos nos informan sobre las condiciones del sistema acuático a largo plazo. Se observan si están presentes o no, la abundancia de las especies y si hay cambios físicos o de conducta. Los quironómidos, una familia de moscas acuáticas, son buenos ejemplos de bio-indicadores. Se colectan en la etapa de larva, pupa, o adulta. También, se puede colectar pupal exuvias, o la piel, en la superficie del agua.

Se usan los números de individuos y especies para escribir un informe. Esta información sirve como "un video," porque los insectos viven en las condiciones que cambian para toda la vida.

### Tomar una muestra del agua

Es como tomar "una fotografía" instantánea. Incluye información sobre las condiciones de un momento, como los niveles de oxígeno o químicos, la claridad, o la temperatura.

Se usan todas las maneras de colectar información para escribir un informe de calidad.





Creado por Amy Maas  
Julio 2011

# Sustainability and Culture

- Exploration and expansion: how others express their concern and awareness of the environment
- Involvement and engagement mediated by the language experience

## A proteger nuestros recursos marinos

CONSERVACIÓN Y PLANIFICACIÓN, TRES PALMAS, SLIDESHOW — FEBRERO 9, 2011 10:06 PM

Por Krystina Scott Sánchez

Foto suministrada por Michelle Scharer



(Acropora palmata), un coral que ha mermado en todo el Caribe desde la década de los '80.

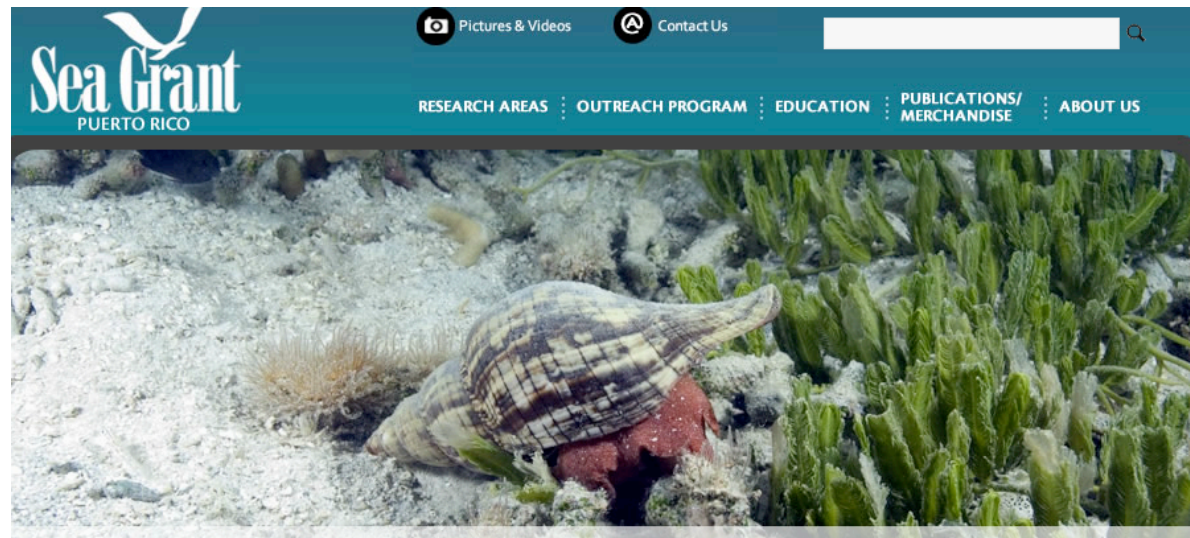


Los recursos marinos de Puerto Rico se encuentran en peligro y son amenazados por el calentamiento global, los cambios antropogénicos y la erosión costera, entre otros factores. En Rincón, se encuentra la Reserva Marina Tres Palmas (RMTP), la cual fue designada oficialmente como un área marina protegida (AMP) en el año 2004 debido a la presencia de colonias saludables del coral cuerno de alce



# Next steps

- Opportunities to volunteer and participate in community initiatives in other countries
  - ✓ University exchange programs
  - ✓ Scientific research exchanges
  - ✓ Mentorship opportunities



# Opportunities

- Sustainability in Government
  - Primer Congreso Iberoamericano de Municipios Verdes, Ciudad de Panamá, 2011
- Historical sustainability
  - Restoration (architecture, history, engineering)
  - Green monuments
- Citizen Groups
- Sustainable Tourist Groups

**CLAC Conference - March 10, 2012**

**French and Sustainability Studies**

**Patricia Mougel – Dept. of French and  
Italian – U of MN**

**<mouge001@umn.edu>**

## **Why sustainability content in French courses?**

- **Current, global issues**
- **Growing interest from students and instructors**
- **Internships abroad around themes of environment protection, international development, social justice issues**
- **Wealth of authentic resources**
- **Allows for critical-thinking, problem-solving tasks**

# **New French Oral Communication course: Fren 3018 (Fall 11)**

**Overarching current events theme: Water  
Local and national picture, France, Francophone World:  
(Québec, Africa)**

- **Topics:**
- **Conservation practices: water footprint**
- **Changing landscapes due to urbanization and industrialization (Minnesota and Mississippi rivers)**
- **Water pollution: Mississippi river, Gulf of Mexico, Brittany (France), St Lawrence river (Montréal, Québec)**

**Water shortages in the world (United States, France, Francophone Africa)**

**Water and women**

**Water and human rights**

▪ **Collaboration with other programs:**

**U of M: Returning students from MSID program in Sénégal (Minnesota Studies in International Development) as guest speakers**

**International: Tandem online partnership (Skype) with students enrolled in Geography Department (Université de Montréal)**



# **Business French course: Fren 3022 (Spring 12)**

## **Topics:**

- **Case studies of French businesses having moved towards more sustainable business practice (company websites)**
- **Green-washing vs. real sustainability (experts audio and video interviews)**
- **Environmental protection and business growth: successful cases (videos: Green business laureates Ministère de l' Ecologie et du Développement Durable)**

- **Green jobs, human resources management and sustainability (videos: Ministère de l' Emploi)**
- **Marketing and sustainability > marketing plan for a sustainable product or service → video – Language/Environment/Media contest sponsored by Institute on the Environment**
- **Collaboration with other programs:**
  - **Native guest speakers: exchange students from France enrolled in MBA program**
  - **Guest speaker: MN French American Chamber of Commerce member: sustainable development projects manager for a large company**

## **Second-semester French: Fren 1002 (Spring 12)**

### **Topics:**

- **Organic food and wine production and consumption (food chapter)**
- **Daily environmentally-responsible habits (environment/geography chapter)**
- **Environmental degradation in Madagascar (environment/geography chapter)**
- **Water shortages in Madagascar (environment/geography chapter)**
- **Ecotourism in Francophone world (travel chapter)**

## **Tasks/Projects:**

### **Fren 3018:**

- **Oral summaries of news broadcasts and articles related to sustainability (water and other sustainable development issues)**
- **Compare/contrast points of view**
- **Express and support opinion**
- **Debate**
- **Comment graphs**
- **End-of-semester oral presentation**

## **Fren 3022:**

- **Marketing project with video version for Language/Environment/Media showcase**

## **Fren 1002:**

- **Tourist brochure on a Francophone city/region innovative in terms of sustainable development initiatives**

# Modeling Collaboration between Foreign Languages and Sustainability Studies



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# Why “Green” German Studies?

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- Most GSD majors are double majors, many in fields that intersect with Sustainability Studies (e.g., Global Studies, Journalism, Biological Sciences)
- DAAD (German Academic Exchange) and other organizations are increasing support for students combining German with environmental studies
- Content-based instruction is an effective model for combining language/culture learning with study of other disciplines

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- Language Placement
- Language Opportunities
- Language Certification
- K-16 Connections**
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- Job Information
- News & Events

[Home](#) > [Language Programs](#) > [K-16 Connections](#) : Green German Project

## Green German Project

The Green German Project is a collection of open-access teaching materials and curricular resources related to sustainability and environmental topics. Developed for use by teachers, students, and curriculum designers, its intended audience is German language and culture courses at the intermediate-advanced level. Users are invited to adapt the materials to their own program needs. The developers gratefully acknowledge the support for the project provided by a Title VI grant through the Center for Advanced Research on Language Acquisition (CARLA) in Summer 2011.

- [Module 1: Nachhaltigkeit](#)
- [Module 2: Carbon Footprint](#)
- [Module 3: Food Supply](#)

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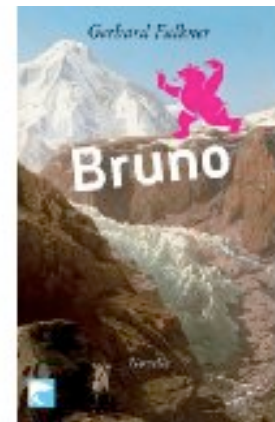
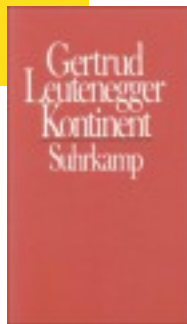


# Curriculum development

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- Spring 2011: Ger 3441 (“20th-Century German Literature”), IAS Faculty Seminar, UROP project, foreign language group (Tarone/CARLA)
- Summer 2011: Grad RA develops web-based instructional units (Title VI)—for use by College in the Schools partners and others
- Spring 2012: Ger 3501 (“Contemporary Germany”)—faculty expert guest speakers, Language/Environment/Media showcase (sponsored by Institute on the Environment Mini-grant)

# German 3441 (Spring 2010): 20th-Century Literature





# Course Objectives (Ger 3441, “20th-Century Literature”)

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- expand abilities to read, interpret, and appreciate literary and multi-media texts related to environmental topics.
- exercise effective communication skills in German and English in ways that lead to the development of critical literacy skills applicable in many contexts (other classes, personal communications, work settings, etc.).
- explore the complex relationships among the formal/aesthetic dimensions of literature, the social/historical contexts of works we read, and the global perspectives relevant to addressing environmental issues today.

# German 3501: “Contemporary Germany” (Spring 2012)



- Topics: food, energy, grassroots politics, media reporting
- Digital media projects for Language / Environment / Media showcase



# Course Objectives (Ger 3501, “Contemporary Germany”)

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- explore the formal/aesthetic dimensions of literature and the arts, transnational public discourses about sustainability issues, and cultural/social/historical contexts that relate to the development of environmental imagination and awareness of global perspectives.
- expand abilities to read, interpret, and appreciate literary and multi-media texts related to contemporary Germany and environmental topics.
- exercise effective communication skills in German and English in ways that lead to the development of critical literacy skills applicable in many contexts (e.g., other classes, work settings, and personal communications).



# Virtual tools to advance CLAC goals:

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- A personal mobile device (I-Pod) is checked out to each student for use during the semester for I-Pod assignments (reports on podcasts).
- On-line video, audio and text resources used each class session to provide expert-generated content input.
- Papers/projects designed around content research