2014 Germany/Sweden Renewable Bioenergy Systems
Itinerary

www/msu.edu/course/be/475/sweden
deadse2014.wordpress.com

In-country Resources
• Germany Consular Review - http://travel.state.gov/content/passports/english/country/germany.html
• Sweden Consular Review - http://travel.state.gov/content/passports/english/country/sweden.html
• Current Germany and Sweden day and time (NOTE: Germany and Sweden are 6 hours ahead of EDT)

MSU Resources
• MSU Study Abroad Office - http://studyabroad.msu.edu/
• MSU Police and Public Safety - http://www.dpps.msu.edu/default.asp

General 2012 itinerary
• Friday, May 9 - Depart from United States / Arrive Stockholm, Sweden
• May 10 - 12 - Stockholm, Sweden
• May 12 - Transfer to Luleå, Sweden (train)
• May 13 - 20 - Luleå area, Sweden
• May 20 - Transfer to Stockholm, Sweden (train)
• May 21 - Transfer to Frankfurt, Germany (air)
• May 21 - Transfer to Munich, Germany (ground)
• May 21 - 25 - Munich area, Germany
• May 25 - 26 - Freiburg, Germany
• May 26 - 28 - Frankfurt area, Germany
• Wednesday, May 28 - Depart from Frankfurt, Germany / Arrive United States

Detailed itinerary

Day 0: Friday, May 9 -- Depart United States
• Tentative schedule:
  o UA4204 09MAY DTW  EWR 107P 312P
  o UA0068 09MAY EWR  ARN  525P 735A+1

Day 1: Saturday, May 10 -- Stockholm, Sweden
• Day leader: Instructors
• Tentative schedule:
  o Arrive Stockholm  7:35 am (clear customs)
  o pm – scavenger hunt
• Accommodations:
  STF Fridhemsplan Hotel & Hostel
  Eriksgatan 20
  112 39 Stockholm
  59.33139108 (Latitude),
  18.03094491 (Longitude)
  011 46 8 653 8800
  www.fridhemsplan.se
Day 2: Sunday, May 11 -- Stockholm, Sweden
- Day leader: Instructors
- Tentative schedule:
  - Free Day - Museums / cultural visits (e.g. Drottningholm Palace, National Palace, Birka, National Historical Museum, Gamla Stan, Stadshuset, Archipelago boat tour, Vasa Museum)
- Accommodations:
  - STF Fridhemsplan Hotel & Hostel
    Eriksgatan 20
    112 39 Stockholm
    59.33139108 (Latitude),
    18.03094491 (Longitude)
    011 46 8 653 8800
    www.fridhemsplan.se

Day 3: Monday, May 12 – Stockholm, Sweden
- Day leader: Mario A. & Brian (Blog)
- Tentative schedule:
  - Storage luggage at hostel
  - Am - STFI?
  - 12:30 pm Hammarby Sjöstad GlashusEtt, centre for environmental information and communication
    Björn Cederquist <bjorn.cederquist@stockholm.se>46 76 12 25 154
- Accommodations:
  - Couchette - Overnight Train - SJ94 17:55 Stockholm C - 07:06 Luleå C SJ, Sleeper train 94 sj.se

Day 4: Tuesday, May 13 -- Luleå, Sweden
Day leader: Mario A. & Brian (Blog - Due within 48 hours)
- Tentative schedule:
  - 1:00-2:30 Biomass gasification for methanol production, Thomas Ekblom
  - 2:30 – 4:30 Liquid hot water pretreatment lab (David)
- Accommodations:
  - First Camp Luleå
    Arcusvägen 110
    975 94 Luleå
    65.59562318 (Latitude)
    22.07215547 (Longitude)
    011 46 9 206 0300
    lulea@firstcamp.se
    firstcamp.se

Day 5: Wednesday, May 14 -- Luleå, Sweden
- Day leader: Lucas & Mackenzie (Blog - Due within 48 hours)
- Tentative schedule:
  - 08.15 – 09.45 Christian Hultberg Catalysis and syngas treatment (room TBD)
  - 10.00 - Bioprocess Engineering start of Lab tour. Enzymatic pre-treatment (Paul) and organosolv (David).
  - Lunch together and then presentations from LTU PhD students
  - Late afternoon: Visit Gammelstad UNESCO World Heritage Site
- Accommodations:
  - First Camp Luleå
    Arcusvägen 110
    975 94 Luleå
    65.59562318 (Latitude)
    22.07215547 (Longitude)
    011 46 9 206 0300
    lulea@firstcamp.se
    firstcamp.se
Day 6: Thursday, May 15 -- Luleå, Sweden

- Day leader: Taylor & Jonathon (Blog - Due within 48 hours)
- Tentative schedule:
  - am - Piteå, SMURFIT KAPPA AND ETC Lecture by Olov Öhrman and then guided tour at ETC
  - pm - Guided tour at Smurfit Kappa by Peder Fahlman
- Accommodations:
  - First Camp Luleå
  - Arcusvägen 110
  - 975 94 Luleå
  - 65.59562318 (Latitude)
  - 22.07215547 (Longitude)
  - 011 46 9 206 0300
  - lulea@firstcamp.se
  - firstcamp.se

Day 7: Friday, May 16 -- Luleå, Sweden

- Day leader: Brandon & Mario G. (Blog - Due within 48 hours)
- Tentative schedule:
  - 08.30 Introduction to Skellefteå plant trip Marcus Öhman
  - E289 Skellefteå. Boda Borg in the afternoon?
- Accommodations:
  - First Camp Luleå
  - Arcusvägen 110
  - 975 94 Luleå
  - 65.59562318 (Latitude)
  - 22.07215547 (Longitude)
  - 011 46 9 206 0300
  - lulea@firstcamp.se
  - firstcamp.se

Day 8: Saturday, May 17 -- Luleå, Sweden

- Day leader: Nick & Mario A. (Blog)
- Tentative schedule:
  - Visit to Sami Museum in Jokkmokk?
  - Hiking in Muddus or hiking/canoeing in Kronogård?
- Accommodations:
  - First Camp Luleå
  - Arcusvägen 110
  - 975 94 Luleå
  - 65.59562318 (Latitude)
  - 22.07215547 (Longitude)
  - 011 46 9 206 0300
  - lulea@firstcamp.se
  - firstcamp.se

Day 9: Sunday, May 18 -- Luleå, Sweden

- Day leader: Nick & Mario A. (Blog)
- Tentative schedule:
  - Afternoon BBQ at Storforsen with LTU group
  - Analytical Response Due
  - Weekly Engagement/Participation Due
- Accommodations:
  - First Camp Luleå
  - Arcusvägen 110
  - 975 94 Luleå
  - 65.59562318 (Latitude)
  - 22.07215547 (Longitude)
  - 011 46 9 206 0300
  - lulea@firstcamp.se
  - firstcamp.se
Day 10: Monday, May 19 -- Luleå, Sweden

- Day leader: Nick & Mario A. (Blog - Due within 48 hours)
- Tentative schedule:
  - 08.30-09.30 Robert Nilsson lecture a lipid production by non-conventional yeast and also introduce our collaboration with SunPine
  - pm Visit to SunPine
  - Oral Analytical Reflection Due

- Accommodations:
  First Camp Luleå
  Arcusvägen 110
  975 94 Luleå
  65.59562318 (Latitude)
  22.07215547 (Longitude)
  011 46 9 206 0300
  lulea@firstcamp.se
  firstcamp.se

Day 11: Tuesday, May 20 -- Luleå, Sweden

- Day leader: Brian & Lucas (Blog)
- Tentative schedule:
  - am - Tour of Kristiina Oksmans lab
  - pm - depart for Stockholm
- Accommodations:
  - Couchette - Overnight Train - 16:39 Luleå C - 06:30 Stockholm C SJ, Sleeper train 91 sj.se

Day 12: Wednesday, May 21 -- Munich, Germany

- Day leader: Brian & Lucas (Blog)
- Tentative schedule:
  - Transfer to Germany - LH0801 21MAY ARN  FRA 1000A 1215P
  - Transfer to Munich (car)
- Accommodations:
  MEININGER Hotel München City Center
  Landsberger Strasse 20
  Schwanthalerhöhe München, 80339
  48.13950975 (Latitude),
  11.54479891 (Longitude)
  011 49 89 5499 8023
  welcome@meininger-hotels.com
  meininger-hotels.com

Day 13: Thursday, May 22 -- Munich, Germany

- Day leader: Brian & Lucas (Blog - Due within 48 hours)
- Tentative schedule:
  - 9AM or 1PM – ROPA (ROPA Fahrzeug, Sittelsdorf 24, D-84097 Herrngiersdorf). Manufacture of sugar beet harvesting equipment and operator of unique fixed film anaerobic digester using sugar beets as feedstock.
  - ZAE Bayern (PENDING) – Solar research.
- Accommodations:
  MEININGER Hotel München City Center
  Landsberger Strasse 20
  Schwanthalerhöhe München, 80339
  48.13950975 (Latitude),
  11.54479891 (Longitude)
  011 49 89 5499 8023
  welcome@meininger-hotels.com
  meininger-hotels.com
Day 14: Friday, May 23 -- Munich, Germany
- Day leader: Mackenzie & Taylor (Blog - Due within 48 hours)
- Tentative schedule:
  o 7:30AM to 8:30AM – Munich Zoo solid anaerobic digester. Dry fermentation system.
  o 9AM to 2PM – UTS/Antergia (UTS Biogastechnik GmbH, Zeppelinstraße 8, D-85399 Hallbergmoos). Leading European and North American developer of biogas projects. Discussion of biogas business, sales and technology,
- Accommodations:
  MEININGER Hotel München City Center
  Landsberger Strasse 20
  Schwantahlerhöhe München, 80339
  48.13950975 (Latitude),
  11.54479891 (Longitude)
  011 49 89 5499 8023
  welcome@meininger-hotels.com
  meininger-hotels.com

Day 15: Saturday, May 24 -- Munich, Germany
- Day leader: Jonathon & Brandon (Blog)
- Tentative schedule:
  o Neuschwanstein Castle
  o Analytical Response Due
  o Weekly Engagement/Participation Due
- Accommodations:
  MEININGER Hotel München City Center
  Landsberger Strasse 20
  Schwantahlerhöhe München, 80339
  48.13950975 (Latitude),
  11.54479891 (Longitude)
  011 49 89 5499 8023
  welcome@meininger-hotels.com
  meininger-hotels.com

Day 16: Sunday, May 25 -- Freiburg, Germany
- Day leader: Jonathon & Brandon (Blog)
- Tentative schedule:
  o Transition to Freiburg
  o Oral Analytical Reflection Due
- Accommodations:
  StayInn Hostel und Gästehaus
  Stühlingerstr. 24a
  Freiburg im Breisgau 79106
  47.99505898 (Latitude)
  7.83539435 (Longitude)
  011 49 76 1363 00573
  info@stayinn-freiburg.de

Day 17: Monday, May 26 -- Frankfurt, Germany
- Day leader: Jonathon & Brandon (Blog - Due within 48 hours)
- Tentative schedule:
  o 9:00AM to 11AM – Craig Morris - current policy/regulations/business aspects of renewable energies in Germany (ecological quarter of Freiburg-Vauban) http://welcometotheenergiewende.blogspot.de/
  o 11AM to 12:30PM – Joachim Merkle – tour of Vauban, ecological housing development, deeper discussion of energy saving measures and techniques, co-generation, photovoltaics for housing developments
  o 3PM to 4:30PM – University of Hohenheim, biogas laboratory and research discussion with Dr. Hans Oechsner (PENDING)
  o Topic Blog Due
- Accommodations:
  MEININGER Hotel FrankfurtMain Messe
  Europaallee 64
  Frankfurt 60327
  50.1085991 (Latitude)
  8.6442711 (Longitude)
Day 18: Tuesday, May 27 -- Frankfurt, Germany
- Day leader: Mario G. & Nick  (Blog - Due within 48 hours)
- Tentative schedule:
  - Bauer Farm, near Butterstadt - Biogas plant operating on corn silage and interesting utilization of heat generated from CHP.
  - Wind farm tour with Wolfgang Bauer
- Accommodations:
  MEININGER Hotel FrankfurtMain Messe
  Europaallee 64
  Frankfurt 60327
  50.1085991 (Latitude)
  8.6442711 (Longitude)
  011 49 69 4015 9052
  welcome@meininger-hotels.com
  meininger-hotels.com

Day 19: Wednesday, May 28 -- Return to US
- Tentative schedule:
  - LH0442 28MAY FRA DTW 1050A 150P

Saturday, May 31
- Tentative schedule:
  - Analytical Response Due

Blog (Due May 26)   Topic
Nick   Distribution, National Grid, Infrastructure, Metering
Mario A.  Efficiency & Waste – Reduce, Reuse, Repurpose, Recycle, By-product Utilization
Brian   Co-generation, Thermal Chemical Conversion, Gasification
Lucas   Energy Policy - Social, Economic and Environmental
Taylor  Renewable vs Conventional - General, Climate Change, Bio, Solar, Wind
Mario G.  Woody Biomass – Direct Burn, Torrefaction, Pelletization
Brandon Sustainable Urban Planning - Energy
Jonathon  Biogas - Anaerobic Digestion
Mackenzie Feedstock, Supply Chain, Energy Crops