

**CESA 10**  
**Next Generation Science Standards Conference**  
**August 6-8, 2013**  
**Graduate Credit Course Proposal**

**Course Information**

Course Title: Next Generation Science Standards (NGSS) Investigation

Instructional Grade Level(s): 4-12

Target Audiences(s): STEM Teachers of Science, Technology, and Engineering

Maximum Number of Participants: 150

Session offered for graduate credit:  Yes - 1 credit (Credit is optional by choice of participant)

Instructor-of-Record Name: Thersea Burzynski

**Course Description:**

*Provide a description that would be appropriate for marketing the course.*

This course is designed as an opportunity for teachers of STEM courses to thoroughly explore one of the Disciplinary Core Ideas from the newly released Next Generation Science Standards (NGSS). There will be three strands, each with a focus on increasing teacher content knowledge and pedagogical practices in the NGSS, thereby improving teaching and learning. Teachers will have an opportunity to observe application of the content by visiting related industries and correlated educational institutions, facilitating their ability to bring application of the STEM content into their classrooms. The course will culminate with teachers using their new knowledge to collaboratively develop lessons that include the practices of science and engineering, as they address learning targets aligned to the NGSS. The three strands, which coincide with the NGSS include Physical Science, Life Science and Earth & Space Science.

**Wisconsin Standards:**

Teacher:

1    2    3    4    5    6    7    8    9    10

Pupil Services:

1    2    3    4    5    6    7

Administrator:

1    2    3    4    5    6    7

**Course Competencies**

*Provide two to three competencies that the educator participants will learn in the course.*

1. Teachers will be able to navigate and interpret the Next Generation Science Standards.
2. Teachers will deepen their understanding of application of STEM related fields within the broader community.
3. Teachers will develop lessons incorporating the practices of science and engineering aligned with the content of the NGSS.

**Sample Learning Activities**

*Identify two to three sample learning activities that the participants will complete in the course.*

1. Teachers will work collaboratively with experts in the scientific community to deepen their understanding of the content necessary to implement the NGSS.

2. Teachers will have experiences out in the field directly connected to the standards of investigation.
3. Teachers will collaboratively develop lessons directly related to the NGSS.

### Course Assessment Requirements

*Identify two to three additional assessment activities (all sessions must include #1 and #2) that each of the participants will be required to do to document successful completion of the session.*

1. Attend all required days.
2. Write a reflection page after Tuesday and Wednesday's activities.
3. Map a unit and/or develop a lesson directly related to the NGSS.

### Instructor-of-Record Information

Instructor-of-Record Name: Thersea Burzynski  
 Graduate degree obtained from: UW - Eau Claire  
 Work Address: CESA 10  
 Work Telephone: 715-720-2036  
 Work Email: tburzynski@cesa10.k12.wi.us

Summer Address:  
 Summer Phone:  
 Summer Email:

Will this course have presenters other than the Instructor-of-Record?  Yes  No

If yes, please identify presenter(s) name(s) and topic(s) of presentation. Please include a short bio for each additional presenter.

Keynote/Facilitator: Mary Staten, former Director of Science Education, Milwaukee Public Schools, current instructor at Alverno College

Keynote/Facilitator: Dr. Forrest Schultz, UW-Stout College of STEM/Chemistry Department

Facilitator: Dr. Kent Syverson, UW-Eau Claire Geology Department

Facilitator: JoAnn Miller, Oconto Falls School District, High School Science Teacher, Wisconsin Science Teacher of the Year

Facilitator: Emily Miller, NGSS Writing Team Member

Facilitator: Ellen Mihm, Curriculum & Instruction Director, Science Consultant, CESA 10

Sponsoring Consortium: STEM

Waive Registration Fee?  Yes  No  
 Waive Session Fee?  Yes  No

Special fees associated with this session: n/a

Any other information regarding this session (for the web or for credit approval):

Will you be offering a continuation or follow-up to this course? If so, what is your plan?

