

PROPOSAL & PRESENTATION INFORMATION
SCHOOL YEAR ~~2008-2009~~2009-2010
STUDENT MENTORING PROGRAM

PART ONE ~ SUBMITTALS

A. METHOD OF DELIVERY (OPTIONS)

1. E-mail to: rsingleton@mail.unomaha.edu
2. By 5:00 **p.m.** on due date, mail / deliver to:
 University of Nebraska at Omaha, PKI 301
 1110 South 67th Street
 Omaha, NE 68182-0694
 Attn: Roy Singleton
3. **PREFERRED:** Web Site Posting - Data must ultimately be entered via Web Site Forms.

B. SUBMITTAL INFORMATION

1. Submittal 1 — ~~November 19, 2009~~ **November 21, 2008**~ (30 points if received on or before due date)
 - a. Project Title
 - b. Brief Synopsis of project (between 100 and 200 words)
 - c. Schedule (Timeline, milestones)
2. Submittal 2 — ~~December 10, 2009~~ **December 12, 2008**~ (30 points if received on or before due date)
 - a. Progress report
 - b. List of attendees for Workshop on ~~January 10th~~ January 9, 2010
3. Submittal 3— ~~March 17, 2010~~ **March 17, 2010**~~March 27, 2009~~~ (30 points if received on or before due date)
 - a. Team Roster with each student's grade (for Award Program and Certificate of Participation)
 - b. Final title and final update of project synopses ~~description of project~~ (will appear in Award Program)
 - c. Progress report

C. WEB POSTING OF SUBMITTALS

1. The Student Mentoring web site location: www.pki.nebraska.edu/simp
2. Project is NOT complete until **ALL 3 SUBMITTALS** are electronically submitted and posted to the web site.

3. To post your submittal you must obtain your team's USERNAME & PASSWORD from your teacher. The SMP Program Administrator will provide a new USERNAME & PASSWORD to your teacher each school year.
 - a. Click on the "Submittals" line.
 - b. Select the specific submittal and click on it. *(Only one of the three submittal links will be activated at a time,time. If you need to update a submittal, just click on the open submittal and it will take you to the edit routine-but you may update any prior information at any time via the Submittal routine).*
 - c. When finished, click the "Preview Submittal" button at the bottom of the page. If edits are needed, use the BACK option-arrow and edit submittalmake changes. If Preview is OK click the "Submit Entry" button, print copy, and exit.
 - d. All material submitted will be posted to the web site except for the Schedule/Progress-Milestones Report. The schedule/progress-milestones report is best printed and placed where all team members may view it and follow their progress.
 - e. **Teachers and Mentors** please review your names, company information, logos, and the team's information to make sure all is correct. **This information will be copied and used 'as is' to generate the Awards Ceremony Program.**

PART TWO - WRITTEN PROPOSALS

A. DUE DATE: March 31, 2010 ~~APRIL 3, 2009~~ by 5:00 PM

B. DELIVERY

1. Mail or Deliver to:
 - University of Nebraska at Omaha, PKI 301
 - 1110 South 67th Street
 - Omaha, NE 68182-0694
 - Attn: Roy Singleton
2. 60 points if received on or before due date
3. Copies: Five (4 bound for evaluators and-plus 1 unbound for reproductionSMP Administrator)

PLEASE NOTE: NO 3-RING BINDERSOR OVERSIZED BINDERS. Copies must be compact to mail to evaluators

C. FORMAT

1. Page Size: 8½ x11" for Text
8½ x11" or 11 x17" (Foldout) for figures and charts
All 11 x17" sheets shall be single-sided
2. ~~2.~~—Number of pages: Text content limited to a maximum of 20 typewritten pages, excluding non-text items such as graphics, photos, charts, etc. If non-text items are interspersed with text, total text portion may not exceed 20 equivalent pages. Appendix material is optional. Minimum body font size is 10 point.
3. In complying with our "Green" approach, text should be placed on the front and back of each page.



D. CONTENT - Must Include the Following but is Not Limited To (This is not an outline):

1. Title Page/Sheet including
 - School Name
 - School Team Leader
 - Mentor Name(s)
 - Brief Project Description Title
 - Date
 - List of Names and Grades of All Student Team Members
2. Project Problem Statement
3. Recommendations (Project Solution)
4. Action Plan for Implementation of Recommendations
5. Team Organization (for example, a Chart)
6. Process Description (Journey Documentation)
7. Lessons Learned
8. Acknowledgments

PART THREE - PRESENTATION

A. April 21, 2010 ~~APRIL 28, 2009~~ at Scott Conference Center

B. TIME LIMITS

1. High School Division
 - Set-up 5 minutes
 - Presentation **20 minutes** maximum
 - Interview (Q & A) 10 minutes maximum
 - Clean-up 5 minutes
2. Middle School Division
 - Set-up 5 minutes
 - Presentation **15 minutes** maximum
 - Interview (Q & A) 10 minutes maximum



Clean-up

5 minutes

C. EVALUATION PANEL

1. Evaluators will be rotated between rooms such that the same four Evaluators will only preside together once.
2. One group will evaluate High School teams and a separate group will evaluate Middle School teams. No evaluator will judge both High School and Middle School teams.
3. Evaluators may be selected from the following areas.
 - Military engineering
 - College level educator
 - Engineering industry
 - Engineering or Architecture consulting

D. CONTENT

1. Presentations are intended to add to, build upon or emphasize elements presented in the written proposal.
2. The use of models and display boards is strongly encouraged but NOT REQUIRED. Models and boards can be used to demonstrate a design element, a process, show plans, etc. There are no evaluation points given for having a model.
3. Any handouts accompanying the presentation shall be limited to 8 single-sided pages (8½ x11" or 11x17" foldout sheets). These are also NOT REQUIRED.

E. LOCATION, ROOM SIZE AND EQUIPMENT

1. Scott Conference Center– University of Nebraska at Omaha - See PKI web site: www.pki.nebraska.edu/simp; Program Information; UNO South Campus Map
2. Teams are ENCOURAGED to attend the ongoing presentations. Teams are asked to stay in the Center Room area during presentations, unless attending one, to keep hallways outside presentation rooms quiet

3. Displays:
 - a. All models/display boards/etc are to be stored in the Center Room on the specified tables until needed for the presentation
 - b. After the presentation they are to be returned to the Center Room.
 - c. **At the end of the competition event** (about 3:30 pm), each team is asked to please help move their model/display boards/etc and table as directed by the Program Officials to locations along the outside walls.

4. The competitions will be held in the four side rooms and the Board Room. Room sizes are 26 x 37 ft. except for the Board Room which is 26 x 44 ft. aaa

5. Equipment:
 - a. Each room will have two 2'x5' tables (for displays or models) and one easel
 - b. Rooms have built-in large screens for presentation
 - c. Teams will be responsible for all other support equipment and arrangements for any special requirements/conditions they may have.

E. TEAM PHOTOGRAPHS

1. Photographs of each team with teacher(s) and mentor(s) will be taken before or after the team's presentation out in the Central room.

2. Team Plaques with these photographs and the gold and or silver level of achievement medals will be delivered to the teacher a few weeks after the Awards Ceremony.

PART FOUR - EVALUATION CRITERIA

A. PROBLEM IDENTIFICATION/ DEVELOPMENT (PROPOSAL & PRESENTATION)

- Clarity of description
- Real world relevance (project need and impact)
- Level of difficulty
- Originality

B. RECOMMENDATIONS AND ACTION PLAN (PROPOSAL & PRESENTATION)

- Clarity of description
- Validity of technical solution basis
- Real world feasibility (economically, politically, socially)
- Solution value relative to cost
- Action plan for implementation

C. JOURNEY & LESSONS LEARNED (PROPOSAL ONLY)

- Team journey description
- Team development issues and resolutions
- Lessons learned and applicability to future

D. MERIT CATEGORIES (PROPOSAL & PRESENTATION)

Each project will be judged in each of the six merit categories by the evaluators according to the team's fulfillment of the attributes of that category:

- Applied Science
- Innovation
- Research

- Sustainability
- Team Work
- Technology
- ~~Sustainability~~

E. TEAM PARTICIPATION & PANEL Q&A (PRESENTATION ONLY)

- Legibility and use of presentation materials
- Presentation concluded within allocated time period
- Presentation flow (lack of transition, i.e. “dead” spots)
- Knowledgeable responses to evaluator questions

PART FIVE - AWARDS

A. POST PRESIDENT’S AWARDS

1. Highest points in each of the High School and Middle School divisions.
2. High School Team: Trophy, \$1,000 cash award for school and a \$1,000 Scholarship for a graduating senior pursuing a degree in Engineering, Architecture, or related sciences.
3. Middle School Team: Trophy and a \$1,000 cash award for School.

B. AWARDS OF DISTINCTION

1. Sponsored by S.A.M.E. Sustaining Members
2. After the Post President Award team, the next five teams with highest scores in each division (total of 10 awards) will be presented an Award of Distinction.
3. Teams receive trophy and \$250.

C. GOLD AND SILVER LEVEL OF ACHIEVEMENT IN MERIT CATEGORIES

1. Gold and Silver medals will be placed on team plaque with team picture.
2. Level of achievement will be recognized at Awards Ceremony.

D. AWARDS CEREMONY

1. All teams must participate in the Student Awards Ceremony. It is expected that all will dress appropriately.
2. All participants’ names along with candid shots and team photos will be posted to the web site
3. Certificates for each student participating will be presented to the teachers during the Competition so they may give them to the students.
4. Copies of the Evaluator’s critiques will be given to the teachers at the Awards Ceremony.
5. Post Presidents and/or Award of Distinction recipients may be asked to speak and/or display their projects during the next year at a SAME Omaha Post meeting, Industry



Day Exhibition, E-Week, and other opportunities that may arise. Please preserve your models and/or display boards for these events

E. MISCELLANEOUS INFORMATION

1. News media (print & television) will be encouraged to cover the students throughout the project development process.
2. Teachers, mentors, and evaluators will be asked to complete post project surveys.
3. Requests for reimbursement of expenses by teams for their projects must be submitted to the Student Mentoring Committee for approval prior to purchase. Send requests to Program Administrator.

APPENDIX
Evaluation Process
School Year ~~2008-2009~~2009-2010
Student Mentoring Program



The following comments pertain to the attached Evaluation Forms.

The intent of this program is to emulate the "real-life" process of an architectural or engineering project. The evaluation process is not to be an academic exercise. Like real life, a written proposal is usually a means architects and engineers use to introduce their project to an interested potential client. If the proposal is good enough, the authors get an opportunity for an interview or in-person presentation.

Evaluation panels have successfully used a process similar to that outlined below. An independent Task Group comprised of military, higher education, and Architecture/Engineering/Construction industry representatives developed the program's format and presentation evaluation criteria. The six Merit Categories are a means to recognize and evaluate the variations and distinctions between projects..

Previous evaluation panels found it helpful to consider themselves as representing a committee charged with determining the funding level each of the proposals would warrant. The following describes how they interpreted the 1 to 5 rating scale:

RATING	CATEGORY	INTERPRETATION
1	Non-Responsive	Failure to address key requirements.
2	Rework Required	Insufficient project definition to warrant any funding. Major deficiencies remain and clarifications are required. Thoroughness and production are below average (incl. - illogic, unsubstantiated conclusions, major grammatical errors, etc.). Additional clarifications and detail, and improved quality required to make acceptable.
3	Satisfactory	Sufficient proposal and presentation but not absolutely sure would fund. Submittal has some deficiencies and/or lacks thoroughness, but can still be accepted. Production quality is average.
4	Good	Proposal worthy of some funding. Submittal is acceptable with minor deficiencies (such as grammatical and/or spelling errors) apparent and some with average (or better) thoroughness and quality in production.
5	Outstanding	Definitely worthwhile project to be funded. Submittal (or presentation) is thorough, accurate, and of high (professional) quality with no apparent deficiencies. Product would be likely candidate for awards in the respective field.

Merit Categories

Applied Science	Use of field or laboratory experimentation; use of scientific analytical methods.
Innovation	Innovative Project Type and/or Solution; cutting edge applications
Research	Extensive use of available information and/or literature; development of information through surveys and studies.
Team Work	Maximized team synergy through extensive use of <u>all</u> team members; capitalizing on individual talents; team harmony through difficult circumstances
Technology	Demonstration or use of current 'state-of-the-art' technology in project design.
Sustainability	Use of sustainable design principles and strategies; showing how sustainable design influences life cycle benefits

Evaluator Scoring - General

Overall Category Ratings (between 1 and 5) are to be recorded in all of the shaded "Ratings" column fields on the Evaluation Forms for each team.

Only fractional ratings in increments of 0.5 allowed. *(The only exception to this is specific to the Proposal Phase Evaluation Form - Field E "Required Proposal Content" - see instruction on form)*

Our computer program will handle the arithmetic in summing all judging panel evaluator scores. The final scores will be in the hundreds. The evaluation system was set-up so the final scores do not look academic.



PROPOSAL PHASE EVALUATION FORM

SCHOOL NAME (and team number if more than one team) _____

SCHOOL CODE (from Room Assignments & Schedule Form) _____

PROJECT TITLE (from Proposal) _____

Required Content:

1. Title Page/Sheet: Include School Name, School Team Leader, Mentor Name(s), Brief Project Description Title, Date and List of Names and Grades of All Team Members
2. Project Problem Statement
3. Recommendations (Project Solution)
4. Action Plan for Implementation of Recommendations
5. Team Organization (Chart)
6. Process Description (Journey Documentation)
7. Lessons Learned
8. Acknowledgments

NOTE: Total proposal **text content** that will be considered is limited to a maximum of 20 typewritten pages, excluding any optional graphics, photos or charts (as deemed necessary). If graphics, photos, charts, etc. are interspersed with text, total text portion may not exceed **20 equivalent** typewritten pages. Appendix material is optional, Minimum permissible text body font size is 10 point.

RATING SCALE:

RATING = 1 NON RESPONSIVE	RATING = 2 REWORK REQUIRED	RATING = 3 SATISFACTORY	RATING = 4 GOOD	RATING = 5 OUTSTANDING
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EVALUATION CRITERIA

	*POINT	** Circle One									
A. PROBLEM IDENTIFICATION/ DEVELOPMENT	12 pts.	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
1. Clarity of Description	25%										
2. Real World Relevance (project need and impact)	25%										
3. Level of Difficulty (from where the team started)	25%										
4. Originality	25%										
B. RECOMMENDATIONS AND ACTION PLAN	20 pts.	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
1. Clarity of Description	20%										
2. Validity of Technical Solution Basis	20%										
3. Real World Feasibility (Economically, Politically, Socially)	20%										
4. Solution Value Relative to Cost	20%										
5. Action Plan for Implementation	20%										
C. JOURNEY & LESSONS LEARNED	6 pts.	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
1. Team Journey Description	33%										
2. Team Development Issues & Resolutions	33%										
3. Lessons Learned (outcomes applicable in future)	33%										
D. MERIT CATEGORIES (Provide ratings in <u>all 6</u> categories)	1 pt	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
1. Applied Sciences	1 pt										
2. Innovation	1 pt										
3. Research	1 pt										
4. Team Work	1 pt										
5. Technology	1 pt										
6. Sustainability	1 pt										
E. REQUIRED PROPOSAL CONTENT	1 pt	0.0	5.0								
1. Includes ALL required content & text	1 pt										

* The boxed Point Value shown indicates relative weight of Evaluation Category
 **Circle your rating in the shaded area. Fractional ratings in increments of 0.5 only
 The Circled Ratings will be put into a computer program that will apply the point values and calculate the score

Evaluator _____ **Date** _____

PRESENTATION & INTERVIEW EVALUATION FORM



SCHOOL NAME (and team number if more than one team) _____

SCHOOL CODE (from Room Assignments & Schedule Form) _____

PROJECT TITLE (from Proposal) _____

Requirements:

1. Set-Up: 5 Minutes
2. Presentation: 20 Minutes High School / 15 Minutes Middle School
3. Interview (Q&A): 10 Minutes
4. Clean Up: 5 Minutes

Presentation Handout (Optional; Not Required)

1. Limited to 8 pages, single sided, 8½"x11" or 11"x17" foldout sheets with 4 color maximum

RATING SCALE:

RATING = 1 NON RESPONSIVE	RATING = 2 REWORK REQUIRED	RATING = 3 SATISFACTORY	RATING = 4 GOOD	RATING = 5 OUTSTANDING
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EVALUATION CRITERIA

***POINT**

****Circle One**

		1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
A. PROBLEM IDENTIFICATION/ DEVELOPMENT	24 pts.									
1. Clarity of Description	<u>25%</u>									
2. Real World Relevance (project need and impact)	<u>25%</u>									
3. Level of Difficulty (from where the team started)	<u>25%</u>									
4. Originality	<u>25%</u>									
B. RECOMMENDATIONS AND ACTION PLAN	40 pts.									
1. Clarity of Description	<u>20%</u>									
2. Validity of Technical Solution Basis	<u>20%</u>									
3. Real World Feasibility (Economically, Politically, Socially)	<u>20%</u>									
4. Solution Value Relative to Cost	<u>20%</u>									
5. Action Plan for Implementation	<u>20%</u>									
C. MERIT CATEGORIES (Mark all 5 categories)										
1. Applied Sciences (field or lab experimentation)	2 pts									
2. Innovation (i.e. topic and/or solution)	2 pts									
3. Research	2 pts									
4. Team Work	2 pts									
5. Technology	2 pts									
6. Sustainability	2 pts									
D. TEAM PRESENTATION & PANEL (Q&A)	8 pts									
1. Readability & Appropriate Use of Graphics / Posters/Slides / Videos and/or Models	<u>25%</u>									
2. Conclude Presentation Within Allocated Time Period	<u>25%</u>									
3. Presentation Flow (lack of transition "dead" spots)	<u>25%</u>									
4. Knowledgeable Responses to Evaluator Questions	<u>25%</u>									

* The boxed Point Value shown indicates relative weight of Evaluation Category.

**Circle your rating in the shaded area. Fractional ratings in increments of 0.5.

The Circled Ratings will be put into a computer program that will apply the point values and calculate the score.

Evaluator _____

Date _____



OVERALL EVALUATION SUMMARY

(The teams are very interested in their overall performance. The evaluator is encouraged to comment on each team.)
(Evaluators must be mindful of the age of the students and provide only constructive criticisms)

SCHOOL NAME (and team number if more than one team) _____

SCHOOL CODE (from Room Assignments & Schedule Form) _____

PROJECT TOPIC _____

COMMENTS:

REPORT:

PRESENTATION:

Please use back if needed

Evaluator Name (not required): _____

Date: _____