



2011 PolarTREC Program Requirements With Additional Recommendations for a Successful Research Experience

PolarTREC is meant to build ongoing, collaborative relationships between educators and polar researchers. The PolarTREC program is designed to facilitate this relationship and provide support for the relationship to grow and become independently sustainable.

One component of successful relationships is collaboration and understanding of each partner; we strive to have teachers and researchers working together as much as possible **before**, **during**, and **after** the polar field experience. Therefore, teachers and researchers selected for PolarTREC are expected to participate in a number of specific program requirements throughout the experience.

ARCUS uses the PolarTREC program requirements in a number of ways, including tracking participation in the program, evaluating the impacts of the program, and collecting data on program participants. Information is used to report to the National Science Foundation, apply for further funding, provide data and information to researchers, publish papers and articles and much more. **Your timely completion of program requirements and the PolarTREC Evaluation is integral to the continued funding and support for the PolarTREC program.** You must contact the PolarTREC Project Managers if you have questions or concerns related to the completion of the program requirements.

Upon successful completion of the program requirements, teachers and researchers will be recognized with a certificate of PolarTREC Participation and Program Completion. In addition, teachers will be rewarded one day of substitute reimbursement for a day of a professional development activity of their choice. Please let us know if there are other ways we can recognize your successful participation in the program (letters of support, references, college credit, etc.).



NOAA Researcher, Bryan Johnson spends some time sharing atmospheric science with PolarTREC teacher Elke Bergholz and her high school students at the United Nations International School in New York city.

The following list briefly outlines the PolarTREC program requirements for both teachers and researchers. The list also includes recommendations for a successful research experience. While these are not program requirements, they come from years of program management and advice from past teachers and researchers on how to make the experience successful.

If you have any questions or concerns regarding these requirements, please contact Janet Warburton or Kristin Timm, PolarTREC Project Managers, at info@polar trec.com or 907-474-1600.

IMPORTANT INFORMATION FOR TEACHERS: Starting in January 2011 most program requirements will be tracked online using your profile page on the PolarTREC website. PolarTREC teachers are responsible for tracking and uploading their own program requirements as they complete them.

Instructions for updating or uploading program requirements:

- 1) Log in to the PolarTREC website. Press the "Edit" tab.
- 2) Check off program requirements that have been completed
- 3) Upload related documents (if applicable)
- 4) Make sure to press "Save" at the bottom of the page!

After you update or upload a program requirement an automatic e-mail will be sent to the PolarTREC Project Managers who are tracking your progress.

Teachers		Researchers	
Program Requirements	Other Recommendations	Program Requirements	Other Recommendations
BEFORE ORIENTATION			
<ul style="list-style-type: none"> Participate in Webinar 1: Meet & Greet E-Mail Biography and Photo to ARCUS Sign and return the PolarTREC Evaluation Acknowledgement to ARCUS Sign and return other PolarTREC Program Paperwork (Acknowledgement and Release Form and Medical Certification Form) 	<ul style="list-style-type: none"> Begin communication and collaboration with the research team Prepare physically, mentally, and pedagogically for the field experience Become familiar with the PolarTREC program, research project, and polar regions Look at the PolarTREC website for background program information 	<ul style="list-style-type: none"> Participate in Webinar 1: Meet & Greet E-Mail Biography and Photo to ARCUS E-Mail 5 Multiple Choice Questions to Angela Larson for the program evaluation Sign and return the PolarTREC Evaluation Acknowledgement to ARCUS 	<ul style="list-style-type: none"> Begin collaboration and communication with the teacher as soon as they have been selected for the expedition Send materials, have meetings or conference calls, etc. to give the teacher a background on your research Become familiar with the PolarTREC program and your responsibilities as a host researcher Designate 1-2 member(s) of the research team to fulfill a research mentor role throughout the PolarTREC experience
DURING ORIENTATION			
<ul style="list-style-type: none"> Post 2 journals to the Virtual Base Camp Call in 1 audio journal (using 1-800 number) Complete the Teacher Pre-Survey Complete the Teacher Pre-Test Complete the Orientation Evaluation Survey 	<ul style="list-style-type: none"> Be respectful of other's time by paying attention, asking good questions, and keeping personal activities restricted to personal time Take this time to ask questions and practice! 		<ul style="list-style-type: none"> Participate in the PolarTREC Orientation and ShareFair in Alaska, if possible

Teachers		Researchers	
Program Requirements	Other Recommendations	Program Requirements	Other Recommendations
BEFORE THE EXPEDITION			
<ul style="list-style-type: none"> Participate in the Pre-Field Logistics Call Participate in Webinar 2 (Arctic/Antarctic) Participate in 1 Polar-Connect Event with your classroom Complete and submit your Needs Assessment Submit your DRAFT Teacher-Researcher Networking Strategy Submit your DRAFT Classroom Implementation Strategy Submit your DRAFT Professional Outreach Strategy Submit your DRAFT Public Outreach Strategy Track and document all outreach events and activities 	<ul style="list-style-type: none"> Practice! Practice! Practice! Using your technology equipment and posting to the Virtual Base Camp Communicate with the research team Invite researcher to visit classroom or participate in a site visit to research's institution, if possible. Apply for PolarTREC Travel Assistance if needed Conduct a public outreach campaign about your upcoming expedition Schedule and prepare for PolarConnect real-time live events from the field Review gear lists and try on any clothing provided by logistics providers Purchase personal apparel or other supplies needed for your expedition Submit medical and dental exam documentation, if required for your expedition Ensure that any forms, passports, or visas have been submitted to the authorities Prepare your substitute and school for participation in <i>Polar-Connect</i> events, using the website, etc. so they can follow you! 	<ul style="list-style-type: none"> Participate in the Pre-Field Logistics Call Ensure that the teacher is aware of any forms, passports, visas, etc. which have to be completed and submitted If you use one, provide a packing or gear list to the teacher Assist the teacher in completion of the draft program requirements, especially the Teacher-Researcher Networking Strategy 	<ul style="list-style-type: none"> Communicate with the teacher Include the teacher in per-expedition team communications Host the PolarTREC teacher at the research institution or visit the PolarTREC teacher's classroom, if possible. Apply for PolarTREC Travel Assistance if needed Work closely with the PolarTREC teacher and program staff to plan and prepare for teacher participation in the research, including scientific, logistics and communication needs If possible, train the teacher on any additional or specialized skills, tools, or technology that will be used in the field

Teachers		Researchers	
Program Requirements	Other Recommendations	Program Requirements	Other Recommendations
DURING THE EXPEDITION			
<ul style="list-style-type: none"> Participate as an active member of the field research team During the field experience, post daily journal entries and photos online Respond to “Ask the Team” Questions online, seek assistance from research team as needed 	<ul style="list-style-type: none"> Balance your roles of teacher, research team member, and public relations specialist Communicate, be safe, remain flexible, have humor, and have fun! Contact PolarTREC Project Managers if any problems arise Use multimedia tools for interviews, sounds from the field, and creating podcasts or videos as another tool for documenting your experience. Connect to classrooms through interactive communication channels such as <i>PolarConnect</i> live events when possible. 	<ul style="list-style-type: none"> Provide mentoring, training and support for the teacher while serving as a member of your team. Provide information and/or assist teachers in answering questions from the public that are posted on the Virtual Base Camp. 	<ul style="list-style-type: none"> Contact PolarTREC Project Managers if any problems arise Recognize that teachers are required to communicate their experience from the field to the public as well as participate in actual research. Help them balance these duties Collaborate with the PolarTREC teacher as they post daily online field journal entries and connect to classrooms from the field and connect with classrooms from the field Help the teacher connect to classrooms through interactive communication channels such as <i>PolarConnect</i>, when possible
IMMEDIATELY FOLLOWING THE EXPEDITION			
<ul style="list-style-type: none"> Post a Closing Journal Entry and/or Reflection Essay Submit your Research Experience Reflection Essay Participate in the Post-Field Debriefing Call 	<ul style="list-style-type: none"> Remember to take adequate time to readjust to returning to the classroom Make sure your administration sends an invoice to ARCUS for substitute reimbursement Return any borrowed gear or equipment to the logistics providers 	<ul style="list-style-type: none"> Participate in the Post-Field Debriefing Call Follow up with PolarTREC and logistics providers to ensure that fiscal responsibilities related to the teacher research experience have been resolved 	<ul style="list-style-type: none"> Check in with your teacher, ensure they made it home okay, and continue communication and collaboration

Teachers		Researchers	
Program Requirements	Other Recommendations	Program Requirements	Other Recommendations
AFTER THE EXPEDITION			
<ul style="list-style-type: none"> Participate in Webinar 3 (Arctic/Antarctic) Submit High Resolution Photos to ARCUS (Up to 300) Return all PolarTREC Tech. Equipment Submit your FINAL Teacher-Researcher Networking Strategy Submit your FINAL Classroom Implementation Strategy Submit your FINAL Professional Outreach Strategy Submit your FINAL Public Outreach Strategy Send Lesson Plans to the research team to review science content Submit Lesson Plan # 1 & #2 Document outreach activities 	<ul style="list-style-type: none"> Participate in a site visit to research team's institution, if possible. Apply for PolarTREC Travel Assistance if needed Invite researcher to visit classroom, if possible Communicate with ARCUS and research team about the program requirements, classroom needs, and ideas and opportunities for continued collaboration When possible, provide support for other teachers in the field by following their expeditions and joining <i>PolarConnect</i> Events 	<ul style="list-style-type: none"> As they are completed, review the teacher's lesson plans for scientific content accuracy 	<ul style="list-style-type: none"> Host the PolarTREC teacher at the research institution, if possible. Apply for PolarTREC Travel Assistance if needed Visit PolarTREC teacher's classroom, if possible Communicate with ARCUS and the teacher about the program requirements, classroom needs, and ideas and opportunities for continued collaboration
FALL FOLLOWING THE EXPEDITION			
<ul style="list-style-type: none"> Administer Student Pre-Survey 			
SPRING FOLLOWING THE EXPEDITION			
<ul style="list-style-type: none"> Administer Student Post-Survey Participate in the Teacher Post-Survey Participate in the Teacher Post-Test Participate in Webinar 4: Season's End 		<ul style="list-style-type: none"> Participate in Webinar 4: Season's End Participate in the Evaluation Researcher Survey (will be administered annually) 	

Teachers		Researchers	
Program Requirements	Other Recommendations	Program Requirements	Other Recommendations
ONGOING ACTIVITIES			
<ul style="list-style-type: none"> Continue to track and document all public outreach efforts. Submit to ARCUS and share with your research team If selected, contribute information for a PolarTREC Case Study 	<ul style="list-style-type: none"> Continue to collaborate with the research team, program staff, and other PolarTREC and TREC teachers and researchers to integrate the field experience into the classroom, and to disseminate the research and experience through community, public, and conference presentations Continue to submit additional lessons and activities to the PolarTREC Learning Resources Continue to post to the VBC if you would like, and check occasionally for questions in your "Ask the Team" forum Participate in the CARE network, a peer-to-peer group of teachers working to bring research experiences to the classroom Become a PolarTREC Partner Teacher for a new PolarTREC teacher 	<ul style="list-style-type: none"> Participate in the Evaluation Researcher Survey, which will be sent to you each year If selected, contribute information for a PolarTREC Case Study 	<ul style="list-style-type: none"> Continue to collaborate with the PolarTREC teacher and program staff as the teacher integrates the field experience into the classroom and disseminates the research experience through community, public, and conference presentations Continue to track and document all public outreach efforts. Encourage other polar researchers to apply for PolarTREC, and incorporate a teacher in their research project Apply to host a teacher again if you would like