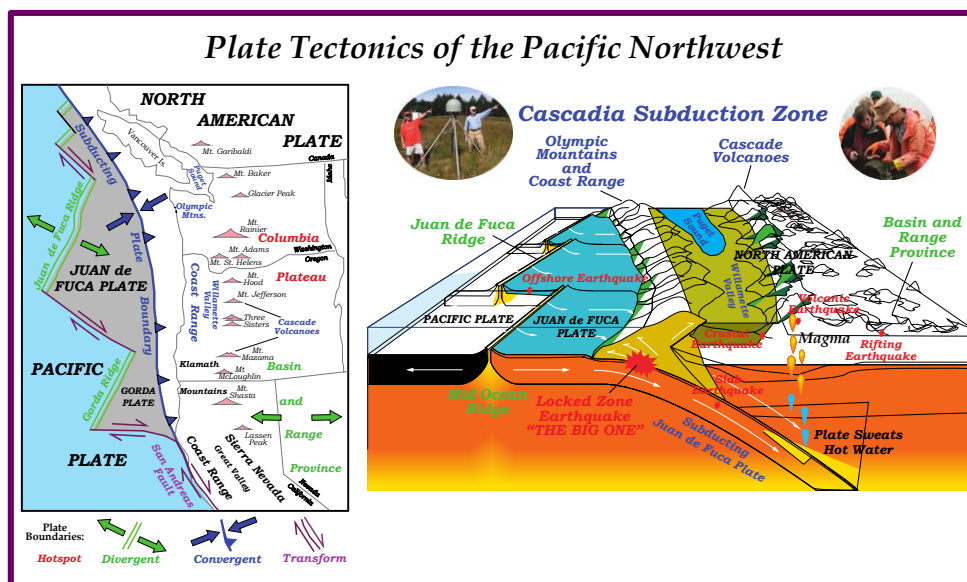


Free Professional Development this August (2017)!

Self-Paced Online Earthquake Education Course Featuring  
Cascadia Earthquake and Tsunami Hazards



Did you know the Cascadia Subduction Zone has produced magnitude 9 earthquakes and resulting massive tsunamis on average every 500 years? And GPS observations document that energy is being stored now that will be released in the next megathrust earthquake? And that there are two other types of Cascadia earthquakes that also pose significant hazards? By taking a free online course this summer, you can increase your understanding about our regional plate tectonics, earthquakes, and tsunamis and how to teach about these important topics!

The ***Cascadia Earthquake Education*** online course is organized into four modules that introduce principles of plate tectonics and earthquakes then apply this general knowledge the Pacific Northwest. Each module includes video lecture(s) and animations as well as Lesson Plans for classroom activities and demonstrations. These lesson plans were designed for middle school students but can be adapted to elementary and high school levels. Each lesson plan specifies the Next Generation Science Standards addressed and most have supporting resources such as student worksheets and answer keys. And all course materials are Open Domain so you can download them for your educational use. **The course will take about 28 hours to complete and you will receive a certificate for 28 PDUs upon successful completion.**

The course was developed by Bob Butler, Professor Emeritus of the University of Portland. Bob has a long history of educating teachers about Earth science, particularly earthquakes and tsunamis. He was named the 2013 Outstanding Professor of Science and Mathematics by the Oregon Academy of Science, received the Oregon Science Teachers Association's Fred Fox Distinguished Service Award in 2014, and the Neil Miner Award from the National Association of Geoscience Teachers in 2015. Bob will be available during August to respond to your questions as you progress through the course.

The course is open to anyone and will be available during the month of August. If you have an interest and would like to register for the course, please send your preferred summer email address to Tisha Morrell, UP STEM Education & Outreach Center, [morrell@up.edu](mailto:morrell@up.edu). You will receive information sometime in July detailing how to access this free on-line course!