

**Tectonics of Orogenic Belts (GEOL 444/644)**

Dr. Wanda Taylor - Office: LFG 214

Class Syllabus - Spring, 2016

Office hours: W 9:30 – 10:30; M 2:30 – 4:00 or by appointment

1. General Lecture Information - The purpose of this course is to provide the student with the material & opportunity to learn about the tectonics of orogenic belts, the many variations of orogenic belts around the world, and the plate tectonic settings of orogenies. The student is expected to attend class meetings, take all exams and participate in discussions of the literature. Generally, late exams or exercises are not permitted. In emergencies, I must be notified at least one hour prior to the scheduled test or exercise due date.

2. Learning Objectives - Basics of orogenesis, the relations between structures and tectonics, an understanding of structural geometries and kinematics, and what they tell us about deformation, and an understanding of examples of different types of orogenic belts.

## 3. Schedule

Week of	Day	Topic	Due
1/17/2016	T	Overview and Plate Tectonics	
	R	Plate Tectonics, Geophysics	
1/24/2016	T	" "	
	R	Structure of the Crust	Exercise
1/31/2016	T	Rifts and Extension	
	R	" "	
2/7/2016	T	Rodinia readings	Rodinia readings
	R	Rifts and Extension	
2/1/2016	T	Extension readings	Extension readings
	R	Strike-slip Deformation	
2/21/2016	T	Strike-slip Deformation	Exam 1 due
	R	Strike-slip Deformation	
2/28/2016	T	Strike-slip Deformation Readings	Strike-slip readings
	R	Convergent Margins	
3/6/2016	T	Convergent Margins	
	R	Anatomy of Orogenic Belts	
3/13/2016	T	The Andes and N.A. Cordillera	
	R	The Andes and N.A. Cordillera	Back-arc F & TB readings
3/20-26/2016	T & R	Mid-semester break	
3/27/2016	T	Back-arc F & TB	
	R	Back-arc F & TB	Back-arc F & TB readings
4/3/2016	T	Collisional belts	
	R	Collisional belts	Exam 2 due
4/10/2016	T	Alpine-Himalayan belt	
	R	Alpine-Himalayan belt Readings	Readings
4/17/2016	T	Appalachian-Caledonide system	
	R	Appalachian-Caledonide system	
4/24/2016	T	Readings	Readings
	R	Exotic terranes	
5/1/2016	T	Exotic terranes	
	R	Exotic terranes Readings	Readings
	5/12/2016	Thursday Noon	Final Exam Due

## 4. Assessment Statement

**GEOL 444** - Assessment of the learning/outcome objectives will be based on 3 lecture exams (@ 21% = 63%), problem set (2%), and importantly discussion questions and discussion participation (30%). Students and the instructor will grade all class members on class participation. Exams will be take home.

**GEOL 644** - Assessment of the learning/outcome objectives will be based on 3 lecture exams (@ 17% = 45%), problem set (2%), a 30-45 minute topic/research presentation (17%), and importantly discussion questions and discussion participation (30%). Students and the instructor will grade all class members on class participation. Exams will be take home.

Absences on Discussion days must be excused. Plagiarism/cheating, especially on exams will result in a zero score on that product and a related discussion with appropriate authorities.

## 5. University Policies

**Academic Misconduct** – Academic integrity is a legitimate concern for every member of the campus community; all share in upholding the fundamental values of honesty, trust, respect, fairness, responsibility and professionalism. By choosing to join the UNLV community, students accept the expectations of the Student Academic Misconduct Policy and are encouraged when faced with choices to always take the ethical path. Students enrolling in UNLV assume the obligation to conduct themselves in a manner compatible with UNLV's function as an educational institution.

An example of academic misconduct is plagiarism. Plagiarism is using the words or ideas of another, from the Internet or any source, without proper citation of the sources. See the *Student Academic Misconduct Policy* (approved December 9, 2005) located at: <http://studentconduct.unlv.edu/misconduct/policy.html>.

**Copyright** – The University requires all members of the University Community to familiarize themselves **with** and to follow copyright and fair use requirements. **You are individually and solely responsible for violations of copyright and fair use laws. The university will neither protect nor defend you nor assume any responsibility for employee or student violations of fair use laws.** Violations of copyright laws could subject you to federal and state civil penalties and criminal liability, as well as disciplinary action under University policies. Additional information can be found at: <http://www.unlv.edu/provost/copyright>.

**Disability Resource Center (DRC)** – The UNLV Disability Resource Center (SSC-A 143, <http://drc.unlv.edu/>, 702-895-0866) provides resources for students with disabilities. If you feel that you have a disability, please make an appointment with a Disabilities Specialist at the DRC to discuss what options may be available to you.

If you are registered with the UNLV Disability Resource Center, bring your Academic Accommodation Plan from the DRC to the instructor during office hours so that you may work together to develop strategies for implementing the accommodations to meet both your needs and the requirements of the course. Any information you provide is private and will be treated as such. To maintain the confidentiality of your request, please do not approach the instructor in front of others to discuss your accommodation needs.

**Religious Holidays Policy** – Any student missing class quizzes, examinations, or any other class or lab work because of observance of religious holidays shall be given an opportunity during that semester to make up missed work. The make-up will apply to the religious holiday absence only. It shall be the responsibility of the student to notify the instructor no later than the end of the first two weeks of classes, **January 29, 2016**, of his or her intention to participate in religious holidays which do not fall on state holidays or periods of class recess. For additional information, please visit: <http://catalog.unlv.edu/content.php?catoid=6&navoid=531>.

**Incomplete Grades** - The grade of I – Incomplete – can be granted when a student has satisfactorily completed three-fourths of course work for that semester/session but for reason(s) beyond the student's control, and acceptable to the instructor, cannot complete the last part of the course, and the instructor believes that the student can finish the course without repeating it. The incomplete work must be made up before the end of the following regular semester for undergraduate courses. Graduate students receiving "I" grades in 500-, 600-, or 700-level courses have up to one calendar year to complete the work, at the discretion of the instructor. If course requirements are not completed within the time indicated, a grade of F will be recorded and the GPA will be adjusted accordingly. Students who are fulfilling an Incomplete do not register for the course but make individual arrangements with the instructor who assigned the I grade.

**Tutoring** – The Academic Success Center (ASC) provides tutoring and academic assistance for all UNLV students taking UNLV courses. Students are encouraged to stop by the ASC to learn more about subjects offered, tutoring times and other academic resources. The ASC is located across from the Student Services Complex (SSC). Students may learn more about tutoring services by calling 702-895-3177 or visiting the tutoring web site at: <http://academicsuccess.unlv.edu/tutoring/>.

**UNLV Writing Center** – One-on-one or small group assistance with writing is available free of charge to UNLV students at the Writing Center, located in CDC-3-301. Although walk-in consultations are sometimes available, students with appointments will receive priority assistance. Appointments may be made in person or by calling 702-895-3908. The student's Rebel ID Card, a copy of the assignment (if possible), and two copies of any writing to be reviewed are requested for the consultation. More information can be found at: <http://writingcenter.unlv.edu/>

**Rebelmail** – By policy, faculty and staff should e-mail students' Rebelmail accounts only. Rebelmail is UNLV's official e-mail system for students. It is one of the primary ways students receive official university communication such as information about deadlines, major campus events, and announcements. All UNLV students receive a Rebelmail account after they have been admitted to the university.

**Final Examinations** – The University requires that final exams given at the end of a course occur at the time and on the day specified in the final exam schedule. See the schedule at: <http://www.unlv.edu/registrar/calendars>.