

GS 4650/7650 Plate Tectonics (WI)

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Overview: This course introduces 1) the basic theory of plate tectonics, 2) plate kinematics and geodynamics, and 3) major tectonic processes in the framework of plate tectonics. The objective is for students to gain a basic understanding of the physics of plates tectonics

This course is **Writing Intensive**. Undergraduate students taking GS4650 will write a term paper on a selected topic of plate tectonics. Graduate students taking GS7650 will write a NSF-type research grant proposal on a specific research topic, DIFFERENT from one's thesis research. Details of the writing projects will be discussed in class.

Textbook: *Global Tectonics* by Kearey and Vine

Reference Books (reserved in the Geology Library)

Geodynamics - by Turcotte & Schubert

Dynamic Earth - by Davies

Plate Tectonics How it Works – by Cox&Hart

Grading

40% Midterm Exam

50% Final Exam or Term Paper

10% Class Participation and presentation

Note: Term papers/proposals will be assigned with a letter grade, which is converted to numerical points as: A: 95; B: 85; C: 75; D: 65, and F: 0 when calculated with other parts for the total. Final grade is assigned as: A: 90% and above; B: 89-80%; C: 79-70%, D: 69-60%, and F: 59% and below.

Important deadlines: *Last day to register, add or change sections:* Aug 27; *Last day to drop course without a grade:* September 24; *Last day to withdraw from a course:* October 29. Note: If you withdraw after 9/24, you will receive a grade W or F based on your accumulated grades at the time of withdrawing. The university policy says that "A student who withdraw from a course after the five-week period receives a grade of W if making a grade of D- or above in the course. If the grade is F, a grade of F is recorded and is counted as an F in the term grade point average." (UMC Undergraduate Catalog, p. 25).

Accommodation of students with disabilities: Students who have special conditions as addressed by the Americans with Disabilities Act, and who need any test or course materials to be furnished in an alternative format, should notify the instructor immediately. Reasonable efforts will be made to accommodate the needs of these students. Such students should register with the Access Office for Students with Disabilities, A038 Brady Commons, Voice (573) 882-4696; TTY(573) 882-8054.

MU policy on academic honesty: Academic honesty is fundamental to the activities and principles of our university. Members of our academic community must be confident that every student's work has been responsibly and honorably acquired, developed, and presented. Any effort on the part of a student to gain an advantage not given to all students (including the asking of an instructor to arbitrarily change a grade) is viewed as dishonest, whether or not that effort is successful. Our academic community regards academic dishonesty as an extremely serious matter, with serious consequences that range from probation, to suspension, to expulsion. If you are ever in doubt about plagiarism, paraphrasing, quoting, or collaboration, consult your course instructor.