

Instructor: Vitaly Vanchurin

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Office: M W Alworth Hall (MWAH) 378

Office hours: Tuesday 9:00-10:00 AM

Classroom: M W Alworth Hall (MWAH) 195

Class hours: Monday, Wednesday 4:00 PM – 5:15 PM

Textbook:            Spacetime and Geometry, Sean M. Carroll  
                          General Relativity, Robert M. Wald  
                          Gravitation, Charles W. Misner, Kip S. Thorne John A. Wheeler

Course content:

Special Relativity  
Manifolds  
Curvature  
Einstein Equations  
Schwarzschild Solution  
Gravitational Waves  
Cosmology

Grading:

Homework assignments 50%  
Mid-term exam 20%  
Final exam 30%

Grading scale:

A is 90% to 100%  
B is 80% to 90%  
C is 70% to 80%  
D is 60% to 70%  
F is below 60%

Disabilities: If there are aspects of this course that result in barriers to your inclusion or your ability to meet course requirements please notify the instructor as soon as possible. You are also encouraged to contact the Office of Disability Resources (KSC 258) to discuss and arrange reasonable accommodations.

### Student Conduct Code:

Appropriate classroom conduct promotes an environment of academic achievement and integrity. Disruptive classroom behavior that substantially or repeatedly interrupts either the instructor's ability to teach, or student learning, is prohibited. Student are expected adhere to Board of Regents Policy: Student Conduct Code:

[http://www1.umn.edu/regents/policies/academic/Student\\_Conduct\\_Code.pdf](http://www1.umn.edu/regents/policies/academic/Student_Conduct_Code.pdf)

### Teaching & Learning: Instructor and Student Responsibilities:

UMD is committed to providing a positive, safe, and inclusive place for all who study and work here. Instructors and students have mutual responsibility to insure that the environment in all of these settings supports teaching and learning, is respectful of the rights and freedoms of all members, and promotes a civil and open exchange of ideas. To reference the full policy please see:

<http://www.d.umn.edu/vcaa/TeachingLearning.html>

### Academic Integrity:

Academic dishonesty tarnishes UMD's reputation and discredits the accomplishments of students. Academic dishonesty is regarded as a serious offense by all members of the academic community. UMD's Student Academic Integrity Policy can be found at:

<http://www.d.umn.edu/conduct/integrity/>

### Excused Absences:

Students are expected to attend all scheduled class meetings. It is the responsibility of students to plan their schedules to avoid excessive conflict with course requirements. However, there are legitimate and verifiable circumstances that lead to excused student absence from the classroom. These are subpoenas, jury duty, military duty, religious observances, illness, bereavement for immediate family, and NCAA varsity intercollegiate athletics. For complete information, please see:

<http://www.d.umn.edu/vcaa/ExcusedAbsence.html>

### Appropriate Student Use of Class Notes and Course Materials:

Taking notes is a means of recording information but more importantly of personally absorbing and integrating the educational experience. However, broadly disseminating class notes beyond the classroom community or accepting compensation for taking and distributing classroom notes undermines instructor interests in their intellectual work product while not substantially furthering instructor and student interests in effective learning. For additional information, please see:

<http://www.d.umn.edu/vcaa/ClassNotesAppropriateUseof.html>