Course: Relativistic Quantum Field Theory  
Physics 621, Fall 2009  
T, R: 12:20 - 14:15, Swain West 220

Instructor: Radovan Dermisek  
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Text: M. Srednicki, Quantum Field Theory  
Chapters: 1-12, 22-24, 33-43, 45-48, 54-59  
Errata and a prepublication draft of the text can be found at http://www.physics.ucsb.edu/~mark/qft.html

Other useful books:  
M. Peskin and R. Schroeder, An Introduction to Quantum Field Theory  
L. Ryder, Quantum Field Theory  
S. Weinberg, Quantum Theory of Fields, Vol. 1 & 2  
P. Ramond, Field Theory: A Modern Primer  
J.D. Bjorken and S.D. Drell, Relativistic Quantum Mechanics  
J.D. Bjorken and S.D. Drell, Relativistic Quantum Fields  
C. Itzykson and J. Zuber, Quantum Field Theory  
and many others

Notes: available (in various formats) on my website.

Homework: there will be assignments about every two weeks, unless specified otherwise they will be due on exactly one week after they are assigned (typically on Thursdays).  
Late Assignments: Start work early on the assignment. Homework handed in within 24 hours of time due will have 20% of the value of the assignment subtracted. Homework handed in later will be accepted at the discretion of the instructor and will be reduced in value by 40%.

Exam: there will be a take home exam assigned on Tuesday 2:15pm and due on Thursday 2:15pm in the last week of classes.

Grading: 70% problem sets, 30% take home exam
Advice:
quantum field theory is a lot of fun. You will learn a lot about nature and it will give you satisfaction. However you will not learn it in the class. In order to understand it you have to be able to derive all the formulas on your own. The class should help you.

Another advice:
don’t think that if you can derive every single formula in the book you understand quantum field theory. Think about physical meaning of equation you are deriving.

Have Fun!!!