

Information about the midterm exam

1. **When** October 26, 2016 from 7pm until 8:30pm
2. **Where** Jeffrey Hall, Room 127, 128
3. **What is covered?** Everything up to and including class on Friday 21/10. Curl and Divergence, Section 3.4. Implicit Function Theorem, not covered and will not appear on the exam.
4. **How many problems?** There will be five problems with subparts.
5. **What to bring to the exam?** Just yourself and pen or pencil, no calculators, cell phones, wifi devices etc....
6. **How to study?** Material and examples from lecture notes, suggested problems, homework problems and tutorial questions should be looked at
7. **Will there be proofs?** No hard core proofs like epsilon-delta, but you have to know how to prove identities such as various forms of product rule, or what the definition of differentiability is. You will also be expected to make conclusions from some of the theorems we covered in class, examples: mixed partial second order derivatives with continuous second order partials are equal; differentiability implies continuity; continuous partials implies differentiability.
8. **What will the exam be testing?** Mostly understanding and (not too complicated) technical skills. For example you should be comfortable with various expressions involving matrices and vectors, parametric equations, planes and normals in all dimensions, gradients, derivatives and implicit functions. Do not expect to have to do long computations.