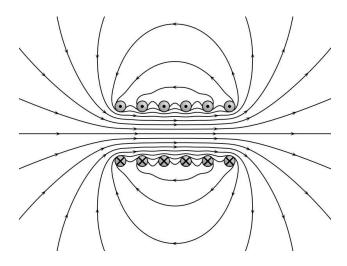
Surface Integral

For a scalar function f over a surface parameterized by u and v, the surface integral is given by

$$\Phi = \int_{S} f da \tag{0.1}$$

$$= \int_{S} f(u, v) du dv$$
 (0.2)

Maxwell's Equations



Integral Form

Differential Form

Grading Policies

- 1. All project must be submitted electronically by 23:59:59 on the due date via TEACH use "Check time on server" if unsure about your clock. TEACH time takes priority over your local computer.
- 2. Only a single late homework assignment allowed. Only allowed up to 7 calendar days late.
- 3. Submit late homework to your assigned TA via email.
- 4. Blatant disrespect to or by the TAs will not be tolerated.
- 5. If you do not demo your project, you do not receive credit for it.
- 6. When you make an appointment to demo, show up. Failure to show up will result in a grade penalty. Repeated offenses will result in no credit for the assignment.
- 7. If your project does not compile, for any reason, no credit will be
- 8. Compilation will be on os-class. This server is the final say on whether your code compiles.
- 9. No directories in you submissions. You will be penalized for including any sort of hierarchy.
- 10. All assignments submitted to TEACH. No late submissions will be accepted via TEACH.
- 11. Naming convention: CS311_proj $\langle x \rangle$ _\(\lambda\)_tar.bz2. Fill in $\langle x \rangle$ with appropriate values.
- 12. No zip files will be accepted. You must use bzipped tar files.
- 13. All non-code documents must be created with LaTeX, by hand. This will be discussed in class.
- 14. All work must be done individually unless specifically allowed to work in groups.

Learning Objectives

- Explain why multiprogramming is important for modern operating systems.
- Explain the general structure of a multiprogrammed operating system.
- Explain the purpose and operation of system calls.
- Write a program utilizing system calls.
- Write a program using a scripting language.
- Write a program that uses regular expressions to parse input data.
- Write a program that spawns processes and provides mutual exclusion for variables or other resources shared by the processes.
- Write a program that uses sockets to implement a client/server system.
- Explain how a common file system works, including structure, I/O operations, and security.
- Describe the memory organization of a typical process in a common operating system.