

## MATH 1060H Background Books and Further Reading:

### Partial Differential Equations:

Evans. *Partial Differential Equations*. American Math Society 1998.

Folland *Introduction to Partial Differential Equations*. 2nd ed. Princeton University Press 1995.

Gilbarg and Trudinger. *Elliptic Partial Differential Equations of Second Order*. 2nd Ed. Springer, 1998.

John *Partial Differential Equations*. 4th ed. Springer 1982.

Strauss *Partial Differential Equations: An Introduction*. Wiley 1992.

Taylor *Partial Differential Equations: I. Basic Theory; II. Qualitative Studies of Linear Equations. III. Nonlinear Equations*. Springer 1997.

### Functional Analysis:

Adams and Fournier. *Sobolev Spaces*. Elsevier Academic Press 2003.

Brézis. *Analyse fonctionnelle: Théorie et applications*. Dunod 1999.

Reed and Simon. *Functional Analysis* (volume 1 of Methods of Modern Mathematical Physics; Revised and Enlarged Edition). Academic Press 1980.

Rudin. *Functional Analysis*. McGraw-Hill 1973.

### Measure Theory and Integration:

Adams and Guillemin. *Measure Theory and Probability* Birkhäuser, 1996.

Lieb and Loss. *Analysis*. American Mathematical Society 1997.

Royden. *Real Analysis*. 3rd ed. McMillan Publishing Co., 1988, 1963.

Rudin. *Real and Complex Analysis*. 3rd ed. McGraw- Hill 1987, 1966.

### Geometric Analysis:

Evans and Gariepy. *Measure Theory and Fine Properties of Functions*. CRC Press 1992.

Federer. *Geometric Measure Theory*. Springer, 1969.

Giusti. *Minimal Surfaces and Functions of Bounded Variation*. Birkhäuser 1984.

Morgan. *Geometric Measure Theory. A Beginner's Guide*. Academic Press 1995.

### Complex Analysis:

Krantz. *Complex analysis : the geometric viewpoint*. Washington, 1990.

Ahlfors. *Complex analysis : an introduction to the theory of analytic functions of one complex variable*. 3d ed. McGraw-Hill, 1979.