

ILLUSTRISSIMO GULIELMO A. GRAHAM, ARMIGERO ;

Carolinæ Septentrionalis Reipublicæ

GUBERNATORI :

Honorando DAVIDI L. SWAIN, Armigero, LL. D.

FACULTATIS PRÆSIDI ;

Omnibusque SENATUS ACADEMICI SOCIIS ;

Universis denique Humanitatis Cultoribus ;

*Exercitationes* hasce Juvenes hodie primi gradus in  
artibus honorem petentes,

Victor Clay Barringer,

Georgius Thomas Baskervill,

Johannes Boen Bynum,

Ricardus Alexander Caldwell,

Johannes Wilder Cameron,

Johannes Xavier Campbell,

Belfield Gulielmus Cave,

Oliver Hart Dockery,

Seaton Gales,

Bryan Grimes, Jun.

Benjamin Simmons Guion,

Thomas Hall Holmes,

Erasmus Roscoe Hooker,

Jacobus Johnston Iredell,

Gulielmus Alexander Jenkins,

Petrus Hector M'Eachin,

Willie Person Mangum, Jun.

Oliver Pendleton Meares,

Jacobus Newton Montgomery,

Hardy Murfree,

Hasell Norwood,

Lorenzo Dow Pender,

Thomas Jefferson Person,

Nathan Alexander Ramsey.

Johannes Kirkland Strange,

Rufus Sylvester Tucker,

Georgius Washington,

Johannes Wilson,

Robertus Willis Wilson.

*reverenter dedicant.*

---

Die Junii Primo, Anno Salutis.

MDCCCXLVIII.

Anno Libertatis LXXIII.

THE UNIVERSITY OF CHICAGO

PHYSICS DEPARTMENT

LECTURE NOTES

PHYSICS 230

CLASSICAL MECHANICS

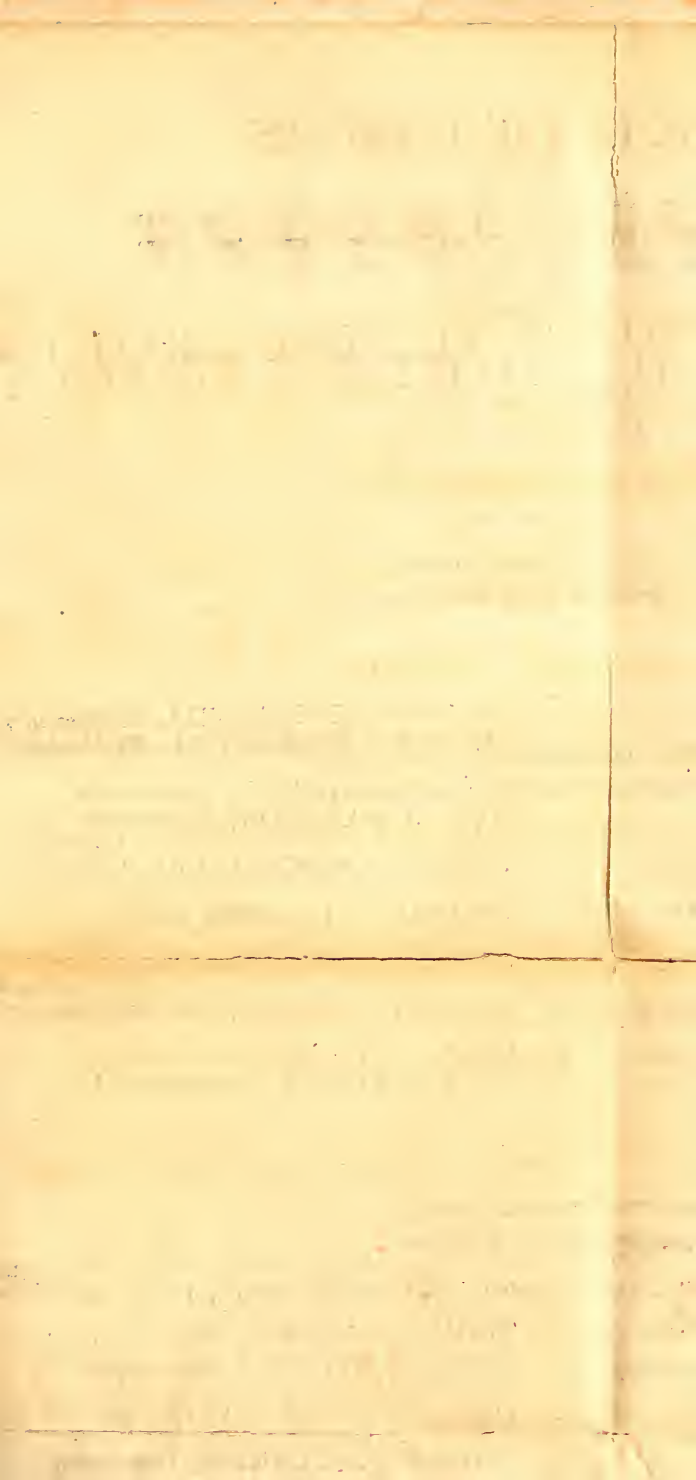
LECTURE 1

REVIEW OF MECHANICS

1.1. Kinematics

1.2. Dynamics

Topic	Page
1.1. Kinematics	1-10
1.2. Dynamics	11-20
2. Lagrangian Mechanics	21-30
3. Hamiltonian Mechanics	31-40
4. Special Relativity	41-50
5. Quantum Mechanics	51-60
6. Statistical Mechanics	61-70
7. Thermodynamics	71-80
8. Electrodynamics	81-90
9. Optics	91-100
10. Acoustics	101-110
11. Fluid Mechanics	111-120
12. Solid State Physics	121-130
13. Nuclear Physics	131-140
14. Particle Physics	141-150
15. Cosmology	151-160
16. Astrophysics	161-170
17. General Relativity	171-180
18. Quantum Field Theory	181-190
19. String Theory	191-200



# SCHEME OF THE EXERCISES

AT THE

## COMMENCEMENT

OF THE

# UNIVERSITY OF NORTH CAROLINA.

JUNE 1st, 1848.

---

### FORENOON.

1. Sacred Music.
2. Prayer.
3. Salutatory Oration, [in Latin.] GEORGE T. BASKERVILL, *Mecklenburg, Va.*
4. Oration. "Inducements to Intellectual Exertion in our Country." JOHN W. CAMERON, *Fayetteville.*
5. Oration. "International Law." JAMES N. MONTGOMERY, *Caswell Co.*
6. Oration. "The Glories of our Age." THOMAS H. HOLMES, *Clinton.*
7. Oration. "~~Poetry of the Bible.~~" VICTOR C. BARRINGER, *Concord.*
8. Oration. "Character of Sir Walter Raleigh." WILLIE P. MANGUM, Jun., *Hillsborough.*
9. Oration. "Fundamental Constitutions of Carolina." JOHN B. BYNUM, *Northampton Co.*

---

### AFTERNOON.

1. Oration. "Decatur's Sentiment"—"Our Country; May she be always right; but right or wrong, our Country." SEATON GALES, *Raleigh.*
2. Oration. "Representative Democracy." THOMAS J. PERSON, *Northampton Co.*
3. Oration. "Character of Hugh S. Legare." OLIVER H. DOCKERY, *Richmond Co.*
4. Oration. "*Cedant arma togæ.*" WILLIAM A. JENKINS, *Warrenton.*
5. Annual Report.
6. Degrees Conferred.
7. Valedictory. JOHN WILSON, *Milton.*
8. Sacred Music.
9. Benediction.