

JOHNS HOPKINS UNIVERSITY CIRCULARS

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ENUMERATION OF CLASSES, FIRST HALF-YEAR, 1897-98.

Mathematics. (62 Students).

Classes meet in the Physical Laboratory, except as otherwise stated.

Advanced Theory of Functions: Professor CRAIG. Monday, Tuesday, and Thursday, 9 a. m., Room 26. (5).
Eiesland. James, G. O. Siff. Stuart, T.
Hardy.

Theory of Surfaces: Professor CRAIG. Monday, Tuesday, and Thursday, 10 a. m., Room 26. (6).
Eiesland. James, G. O. Siff. Stuart, T.
Hardy. McInnes.

Mathematical Conference: Professor CRAIG. Friday, 9 a. m., Room 26. (6).
Eiesland. James, G. O. Siff. Stuart, T.
Hardy. McInnes.

Elementary Theory of Functions: Dr. CHESSIN. Monday and Tuesday, 11 a. m., Room 26. (7).
Eisenhart. Ortman. Reese, H. M. Stuart, T.
James, G. O. Rabinovitch. Siff.

Projective Geometry: Dr. CHESSIN. Thursday and Friday, 12 m., Room 26. (2).
Hardy. Rabinovitch.

Theory of Invariants: Dr. COHEN. Wednesday, 8 a. m., Thursday and Friday, 11 a. m., Room 26. (4).
Eiesland. Eisenhart. Rabinovitch. Siff.

Differential Equations: (Undergraduate Elective): Dr. COHEN. Tuesday and Thursday, 8 a. m., Room 27. (20).
Armstrong, J. R. C. Eisenhart. Martin. Rabinovitch.
Beeuwkes, R. K. Everett. Meyer. Reese, H. M.
Dorsey, H. G. Fitzgerald. Ortman. Siff.
Eisenhart. Frank, E. Pender. Swaine.
Edmunds. Lucke. Potts. Whitehead.

Determinants; Calculus (Special Topics): (Major Course): Dr. HULBURT. Daily, except Monday, 9 a. m., Room 27. (8).
Bestor. Ford. Meyer. Routh.
Eisenhart. Haulenbeek. Rabinovitch. Whitehead.

Analytic Geometry and Calculus: (Minor Course): Dr. HULBURT. Daily, except Friday, 1 p. m., Room 26. (26).
Altwater. Donaldson. Gminder. Liddell.
Baetjer, H. Douglas. Howard. Mackall.
Beale. Flinn. Hyde. Powell.
Beeuwkes, C. J. Ford. James, R. Smith, W. L.
Bird. Foster, F. Kerr. Turnbull.
Brooks, C. E. Foutz. King, T. H. Wirt.
Byers. Francis, I. H.

Elementary Solid Geometry: Dr. COHEN. Monday, 9 a. m., Tuesday, 10 a. m., Wednesday, 11 a. m., Thursday, 12 m., Room 7, McCoy Hall. (9).
Anderson. Diggs. Levering. Snavely, G. E.
Bernheim. Homer. Morrison. Stein, L. D.
Constantine.

Physics and Astronomy. (103 Students).

Classes meet in the Physical Laboratory.

Heat Conduction; Light: Professor ROWLAND. Daily, except Wednesday, 10 a. m. (8).
Harrison, C. N. Penniman. Rothermel. Schenck.
Mendenhall. Rhoads. Saunders, F. A. Waidner.

Physical Seminary: Dr. AMES. Saturday, 9 a. m. (12).
Bliss. Mather. Penniman. Saunders, F. A.
Dorsey, N. E. Mendenhall. Rhoads. Schenck.
Harrison, C. N. Mitchell. Rothermel. Waidner.

Journal Meeting: Professor ROWLAND and Dr. AMES. Wednesday, 11 a. m. (24).
Bliss. James, G. O. Mitchell. Rhoads.
Dorsey, N. E. Jones, H. C. Ortman. Rothermel.
Eisenhart. Martin. Penniman. Saunders, F. A.
Edmunds. Mather. Potts. Schenck.
Harrison, C. N. Mendenhall. Reese, H. M. Waidner.
Huff. Meyer. Reid, H. F. Whitehead.

Optical Theories: Dr. AMES. Thursday and Friday, 11 a. m. (20).
Eisenhart. Martin. Ortman. Rothermel.
Edmunds. Mather. Penniman. Saunders, F. A.
Harrison, C. N. Mendenhall. Potts. Schenck.
Huff. Meyer, J. F. Reese, H. M. Stuart, T.
James, G. O. Mitchell. Rhoads. Waidner.

Physics: (Major Course): Dr. AMES. Daily, except Thursday, 12 m. (24).
Armstrong, J. R. C. Frank, E. Lucke. Potts.
Beale, R. B. Ford. Martin. Siff.
Bestor. Haulenbeek. McInnes. Smith, F. W.
Eisenhart. Horn. Meyer. Straus.
Fitzgerald. Huff. Ortman. Whitten.
Judge. Pender. Young.

Physics: (Minor Course): Dr. AMES. Daily, except Tuesday, 10 a. m. (39).
Abercrombie. Foutz. McAll. Simmons.
Altwater. Geraghty. Meisenhelder. Smith, S. P.
Berkeley. Glaser. Morrison. Taneyhill.
Blanchard. Greene, C. W. Remsen, C. M. Turnbull.
Bouchelle. Herrick. Robinson, G. C. White.
Breed. Howard. Rogers. Wight.
Bruce. James, R. Rous. Williams, D.
Case. L'Engle. Routh. Winslow.
Donaldson. Liddell. Russell. Winston.
Douglas. Mackall. Seth.

Applied Electricity: (Second Year): Dr. DUNCAN. Monday and Tuesday, 9 a. m., Room 24. (12).
Bartell. Frank, E. Hodges, W. L. Martin.
Brady, W. B. Gorsuch. Keidel, F. B. Ortman.
Edmunds. Haldeman. Kershner. Spencer.

Applied Electricity: (First Year): Dr. DUNCAN. Thursday and Friday, 9 a. m., Room 24. (13).
Armstrong, J. R. C. Dorsey, H. G. Frank, E. Ortman.
Beale, R. B. Edmunds. Haldeman. Stephens, J. C.
Beeuwkes, R. K. Everett. Judge. Swaine.
Brady, W. B.

Electrical Measurements: Mr. HERING. Monday and Friday, 10 a. m., Room 27. (13).

Armstrong, J. R. C.	Dorsey, H. G.	Haldeman.	Ortmann.
Beale, R. B.	Everett.	Judge.	Stephens, J. C.
Beuwkes, R. K.	Frank, E.	Martin.	Swaine.
Brady, W. B.			

Steam Engine: Mr. GEER. Wednesday, Thursday, and Friday, 11 a. m., Room 27. (7).

Bartell.	Haldeman.	Keidel, F. B.	Spencer.
Gorsuch.	Hodges, W. L.	Kershner.	

Strength of Materials: Mr. GEER. Monday and Tuesday, 11 a. m., Room 27. (9).

Armstrong, J. R. C.	Dorsey, H. G.	Haulenbeek.	Stephens, J. C.
Beale, R. B.	Everett.	Judge.	Swaine.
Beuwkes, R. K.			

Electrical Seminary: Dr. DUNCAN, Mr. HERING, Mr. GEER. Wednesday, 9 a. m. (17).

Armstrong, J. R. C.	Dorsey, H. G.	Haldeman.	Kershner.
Bartell.	Everett.	Hodges, W. L.	Spencer.
Beale, R. B.	Frank, E.	Judge.	Stephens, J. C.
Beuwkes, R. K.	Gorsuch.	Keidel, F. B.	Swaine.
Brady, W. B.			

Spherical and Practical Astronomy: Dr. POOR. Tuesday, 9 a. m., Wednesday, 10 a. m., Room 34. (4).

Eisenhart.	James, G. O.	McInnes.	Penniman.
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Observatory Work: Dr. POOR and Dr. DORSEY. Daily, 8 p. m. (9).

Eiesland.	McInnes.	Mitchell.	Saunders, F. A.
Eisenhart.	Mendenhall.	Penniman.	Stuart, T.
James, G. O.			

Descriptive Astronomy: (Undergraduate Elective): Dr. POOR. Monday, 9 a. m., Tuesday, 10 a. m., Room 34. (3).

Duffy.	Palmer, J. H.	Routh.
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Celestial Mechanics: Dr. CHESSIN. Monday, Tuesday, and Wednesday, 12 m., Room 34. (2).

Mitchell.	Stuart, T.
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Laboratory Work: Professor ROWLAND, Dr. DUNCAN, Dr. AMES, Mr. HERING, Mr. GEER, Dr. BLISS, Dr. DORSEY. Daily, 9 a. m. to 5 p. m. (91).

Abercrombie.	Ford.	Mackall.	Seth.
Altwater.	Foutz.	Martin.	Siff.
Armstrong, J. R. C.	Frank, E.	McAll.	Simmons.
Bartell.	Geraghty.	McInnes.	Smith, F. W.
Beale, R. B.	Glaser.	Meisenhelder.	Smith, S. P.
Beuwkes, R. K.	Gorsuch.	Mendenhall.	Spencer.
Berkley.	Greene, C. W.	Meyer.	Stephens, J. C.
Bestor.	Haldeman.	Mitchell.	Straus.
Blanchard.	Harrison, C. N.	Morrison.	Stuart, T.
Bouchelle.	Haulenbeek.	Ortmann.	Swaine.
Brady, W. B.	Herrick.	Pender.	Taneyhill.
Breed.	Hodges, W. L.	Penniman.	Turnbull.
Bruce.	Horn.	Potts.	Ver Planck.
Case.	Howard.	Reese, H. M.	Waidner.
Donaldson.	Huff.	Remsen, C. M.	White.
Dorsey, H. G.	James, G. O.	Rhoads.	Whitehead.
Douglas.	James, R.	Robinson, G. C.	Whitten.
Earhart.	Judge.	Rogers.	Wight.
Edmunds.	Keidel, F. B.	Rothermel.	Williams, D.
Eiesland.	Kershner.	Rous.	Winslow.
Eisenhart.	L'Engle.	Routh.	Winston.
Everett.	Liddell.	Saunders, F. A.	Young.
Fitzgerald.	Lucke.	Schenck.	

Special Course in Physics for Medical Students: Dr. MATHER. Saturday, 9 a. m.-12 m. (7).

Baldwin.	Bloombergh.	Hume.	Ulrich.
Berry.	Drake.	Lewis.	

Chemistry. (126 Students).

Classes meet in the Chemical Laboratory, unless otherwise stated.

Organic Chemistry: (For Graduate Students): Professor REMSEN. Monday and Tuesday, 9 a. m. (42).

Arbuckle.	Crane.	Magruder.	Simmons.
Berkeley.	Douglas.	Mattern.	Smith, E. S.
Bird.	Fraps.	Nakaseko.	Suppan.
Black.	Hancock.	Ota.	Turner.
Blanchard.	Holmes.	Patterson.	Washburn.
Byers.	Horn.	Potts.	Waters.
Canter.	Howard.	Reid, E. E.	Weedon.
Case.	Humphreys.	Russell.	Whitten.
Caspari.	Jones, W. A.	Ryland.	Wilson, F. D.
Chamberlain.	King, S. H.	Scott.	Winston.
Cook, C. G.	Lawson.		

Journal Meeting: Professor REMSEN. Saturday, 9-10.30 a. m. (45). The instructors in Chemistry and the following students:

Arbuckle.	Crane.	Magruder.	Smith, E. S.
Berkeley.	Douglas.	Mattern.	Suppan.
Black.	Fraps.	Nakaseko.	Turner.
Blanchard.	Holmes.	Ota.	Washburn.
Byers.	Horn.	Reid, E. E.	Waters.
Canter.	Howard.	Russell.	Weedon.
Case.	Humphreys.	Ryland.	Whitten.
Caspari.	Jones, W. A.	Scott.	Wilson, F. D.
Chamberlain.	King, S. H.	Simmons.	Winston.
Cook, C. G.	Lawson.		

Inorganic and Analytical Chemistry: (For Graduate Students): Professor MORSE. Friday, 9 a. m. (28).

Arbuckle.	Caspari.	Jones, W. A.	Simmons.
Berkeley.	Cook, C. G.	King, S. H.	Smith, E. S.
Black.	Crane.	Mattern.	Turner.
Blanchard.	Douglas.	Ota.	Waters.
Byers.	Horn.	Russell.	Weedon.
Canter.	Howard.	Ryland.	Whitten.
Case.	Humphreys.	Scott.	Wilson, F. D.

Physical Chemistry: Dr. RANDALL. Wednesday and Thursday, 9 a. m. (21).

Ballard.	Douglas.	King, S. H.	Ryland.
Black.	Fischer, J. S.	Ota.	Suppan.
Blanchard.	Hancock.	Potts.	Turner.
Byers.	Horn.	Reese, H. M.	Weedon.
Canter.	Howard.	Russell.	Whitten.
Cook, C. G.			

Special Course in Physical Chemistry: Dr. H. C. JONES. Thursday and Friday, 12 m. (11).

Byers.	Howard.	Reese, H. M.	Whitten.
Caspari.	King, S. H.	Suppan.	Wilson, F. D.
Hancock.	Ota.	Waters.	

Inorganic Chemistry: (Major Course): Professor RENOUE. Daily, except Monday, 9 a. m. (35).

Bouchelle.	Herrick.	L'Engle.	Smith, W. L.
Breed.	Hirshberg.	Liddell.	Taveau.
Bruce.	Huff.	Morgan.	Thomas, R. H.
Cook, H. W.	Jungbluth, M.	Remsen, C. M.	Tobin.
Flinn.	Keidel, A.	Robinson, G. C.	Werber.
Greenbaum.	King, T. H.	Rogers.	Williams, D.
Haskell.	Lazenby.	Smith, R. M.	Wright, A.

In addition, the following graduate students attend the lectures of the Major Course:

Bird.	Martin.	Rothermel.	Washburn.
Kershner.	Patterson.	Waidner.	

General Chemistry: (Minor Course): Professor REMSEN, Dr. RANDALL, Dr. GILPIN. Daily, except Monday, 9 a. m., Hopkins Hall. (57).

Altwater.	Foster, F.	Jones, T. D.	Smith, F. W.
Baetjer, H.	Foutz.	Jungbluth, K.	Smith, S. P.
Brady, J. H.	French.	Levering.	Smull.
Brent.	Gaddess.	McAll.	Spilman.
Brooks, C. E.	Geraghty.	McIntosh.	Stein.
Cleaver.	Glaser.	Miller, R. D.	Stewart, W. P.
Clunet.	Gminder.	Mullen.	Taneyhill.
Crummer.	Gordon.	Murkland.	Ulman.
Dieffenbach.	Grimes.	Powell.	White.
Donaldson.	Hubner.	Robinson, E. A.	Winslow.
Downes.	Hyde.	Ross.	Wirt.
Fosnocht.	James, R.	Rous.	Wright, H. C.

In addition, the following graduate students attend the lectures of the Minor Course:

Berkeley.	Fraps.	Russell.	Waters.
Case.	Jones, W. A.	Simmons.	Weedon.
Crane.			

Laboratory Work: Professor REMSEN, Professor MORSE, Professor RENOUE, Dr. RANDALL, Dr. GILPIN, Dr. H. C. JONES, Dr. REESE. Daily, 9 a. m. to 5 p. m. (124).

Arbuckle.	Fosnocht.	King, T. H.	Simmons.
Altwater.	Foster, F.	Lawson.	Smith, E. S.
Baetjer, H.	Foutz.	Lazenby.	Smith, F. W.
Berkeley.	Francis, I. H.	L'Engle.	Smith, R. M.
Bird.	Fraps.	Levering.	Smith, S. P.
Black.	French.	Liddell.	Smith, W. L.
Blanchard.	Gaddess.	Magruder.	Smull.
Bouchelle.	Geraghty.	Martin.	Spilman.
Brady, J. H.	Glaser.	Mattern.	Stein.
Breed.	Gminder.	McAll.	Stewart, W. P.
Brent.	Gordon.	McIntosh.	Suppan.
Brooks, C. E.	Greenbaum.	Miller, R. D.	Surface.
Bruce.	Grimes.	Morgan.	Taneyhill.
Bruns.	Hancock.	Mullen.	Taveau.
Byers.	Haskell.	Murkland.	Thomas, R. H.
Canter.	Herrick.	Nakaseko.	Tobin.
Case.	Hirshberg.	Ota.	Turner.
Caspari.	Holmes.	Patterson.	Ulman.
Chamberlain.	Horn.	Potts.	Washburn.
Cleaver.	Howard.	Powell.	Waters.
Clunet.	Hubner.	Reese, H. M.	Weedon.
Cook, C. G.	Huff.	Reid, E. E.	Werber.
Cook, H. W.	Humphreys.	Remsen, C. M.	White.
Crane.	Hyde.	Robinson, E. A.	Whitten.
Crummer.	James, R.	Robinson, G. C.	Williams, D.
Dieffenbach.	Jones, T. D.	Rogers.	Wilson, F. D.
Donaldson.	Jones, W. A.	Ross.	Winslow.
Douglas.	Jungbluth, K.	Rous.	Winston.
Downes.	Jungbluth, M.	Russell.	Wirt.
Fischer, J. S.	Keidel, A.	Ryland.	Wright, A.
Flinn.	King, S. H.	Scott.	Wright, H. C.

Geology. (37 Students).

Classes meet in the Geological Laboratory.

General Geology: Professor CLARK and Dr. SHATTUCK. Lectures, daily, except Friday, 12 m.; laboratory work, Wednesday, 2-5 p. m.; excursions, Saturdays. (15).

Canter.	Fraps.	Rowe.	Thomas, R. H.
Cleaver.	Hall, C. M.	Stein.	Turner.
Coker.	Lehr.	Surface.	Williams, D.
Fischer, J. S.	Robinson, G. C.	Taveau.	

Physiographic Geology: Mr. GILBERT. Daily, except Friday, 4 p. m., January 1 to February 15. (11).

Abbe.	Coker.	Hartzell.	Rowe.
Canter.	Glenn.	Leonard.	Surface.
Cleaver.	Hall, C. M.	McLaughlin.	

Historical Geology: Professor CLARK. Tuesday and Wednesday, 9 a. m. (10).

Abbe.	Hall, C. M.	McLaughlin.	Rowe.
Dorsey, C. W.	Hartzell.	Reese, A. M.	Surface.
Glenn.	Leonard.		

Paleontology: (*Laboratory Work*): Professor CLARK and Dr. SHATTUCK. Daily, 9 a. m. to 5 p. m. (10).

Abbe.	Hall, C. M.	McLaughlin.	Rowe.
Cleaver.	Hartzell.	Reese, A. M.	Surface.
Glenn.	Leonard.		

Geological Physics: Dr. REID. Friday, 11 a. m., after January 1. (7)

Abbe.	Hartzell.	Leonard.	O'Harra.
Dorsey, C. W.	Glenn.	McLaughlin.	

Geological Physics: (*Laboratory Work*): Dr. REID. Daily, 9 a. m. to 5 p. m. (4).

Abbe.	Glenn.	Leonard.	McLaughlin.
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Petrography: Dr. MATHEWS. Thursday, 9 a. m., Friday, 11 a. m. (8).

Abbe.	Hall, C. M.	Leonard.	Rowe.
Glenn.	Hartzell.	McLaughlin.	Surface.

Petrography: (*Laboratory Work*): Dr. MATHEWS. Daily, 9 a. m. to 5 p. m. (9).

Abbe.	Hall, C. M.	Leonard.	Rowe.
Cleaver.	Hartzell.	McLaughlin.	Surface.
Glenn.			

Mineralogy: Dr. MATHEWS. Lectures, daily, except Friday, 11 a. m.; laboratory work, Monday, 2-5 p. m.; excursions, Saturdays. (18).

Black.	Hancock.	McLaughlin.	Surface.
Caspari.	Hartzell.	Patterson.	Washburn.
Cleaver.	Holmes.	Rowe.	Weedon.
Glenn.	Humphreys.	Scott.	Wilson, F. D.
Hall, C. M.	Leonard.		

Climatology: Mr. FASSIG. Monday and Thursday, 9 a. m. [12 lectures]. (19).

Abbe.	Glenn.	Leonard.	Saunders, F. A.
Cronk.	Hall, C. M.	Mathews.	Shattuck.
Dorsey, C. W.	Hartzell.	McLaughlin.	Surface.
Easton.	Howe.	O'Harra.	Walz.
Gilpin.	Jewell.	Rowe.	

Map Drawing: Mr. GEER. Afternoons, Front Building, Room 9. (7).

Cleaver.	Hartzell.	McLaughlin.	Surface.
Hall, C. M.	Leonard.	Rowe.	

Journal Club: Professor CLARK, Dr. REID, Dr. MATHEWS. Friday, 9 a. m. [After January 1, Saturday, 9 a. m.]. (13).

Abbe.	Fassig.	Hartzell.	Rowe.
Bibbins.	Glenn.	Leonard.	Shattuck.
Cleaver.	Hall, C. M.	McLaughlin.	Surface.
Dorsey, C. W.			

Biology. (92 Students.)

Classes meet in the Biological Laboratory.

Advanced Zoology: Professor BROOKS. Daily, 10 a. m. to 5 p. m. (6).

Berger.	Grave.	Lefevre.	Reese, A. M.
Drew.	Lamb.		

Zoological Journal Club: Professor BROOKS and Dr. ANDREWS. Friday, 11 a. m. (15).

Barton.	Grave.	Johnson, D. S.	Metcalf.
Berger.	Greene, C. W.	Knower.	Reese, A. M.
Coker.	Harrison, R. G.	Lamb.	Sudler.
Drew.	Howe.	Lefevre.	

Zoology: (*Major Course*): Professor BROOKS. Daily, except Monday, 9 a. m.; Monday and Tuesday, 2-5 p. m. (7).

Chambers.	Dohme.	Renouf, V. A.	Wooldridge.
Coker.	Howe.	Scholl.	

Zoology: (*Undergraduate Elective*): Professor BROOKS. Tuesday, 2-5 p. m. (4).

Ferguson.	Lehr.	Myers, S. B.	VerPlanck.
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Physiological Seminary: Professor HOWELL. Tuesday, 4 p. m. (4).

Dreyer.	Greene, C. W.	Herrick.	Walden.
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Physiological Journal Club: Professor HOWELL. Monday, 4 p. m. (4).

Dreyer.	Greene, C. W.	Herrick.	Walden.
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Animal Physiology: Professor HOWELL. Wednesday, Thursday, and Friday, 12 m. (46).

Graduate Students.

Crane.	Herrick.	Norris, R. S.	Walden.
Howe.			

Medical Students.

Akerman.	Eggers.	Hewlett.	Rand.
Allen.	Evans, H. C.	Kellogg.	Reed, D. M.
Austin.	Fairbank.	Kyes.	Rusk.
Beale, A. E.	Farrar.	Lewis.	Sabin.
Bettman.	Fisher, A. L.	Little, H. W.	Sowers.
Brülle.	Fisher, W. A.	MacCallum.	Stone, E. A.
Burman.	Fletcher.	Marvell.	Thayer, L. H.
Chace.	Flint.	Meltzer.	Warren, M.
Chittenden.	Healy.	Myrick.	West, J. M.
Christian.	Hendrickson.	Odell.	Woolley.
Dancy.			

Osteology: (*Minor Course*): Dr. ANDREWS. Monday and Wednesday, 10 a. m. (30).

Abbe.	Duffy.	Meisenhelder.	Rowe.
Anderson.	Francis, W. W.	Miller, F. O.	Smith, R. M.
Ballard.	Hirshberg.	Nakaseko.	Stein, L. D.
Browne, B. B.	Howe.	Palmer, E. L.	Sudler.
Burrell.	Jungbluth, M.	Purcell.	Thomas, R. H.
Canter.	Lazenby.	Reese, A. M.	Tobin.
Cator.	L'Engle.	Rogers.	Williams, D.
Coker.	Mattern.		

General Biology: (*Minor Course*): Dr. ANDREWS. Thursday and Friday, 10 a. m., 2-5 p. m. (30).

Abbe.	Duffy.	Meisenhelder.	Smith, R. M.
Anderson.	Francis, W. W.	Miller, F. O.	Stein, L. D.
Ballard.	Hirshberg.	Nakaseko.	Sudler.
Browne, B. B.	Howe.	Palmer, E. L.	Thomas, R. H.
Burrell.	Jungbluth, M.	Purcell.	Tobin.
Canter.	Lazenby.	Rogers.	Washburn.
Cator.	L'Engle.	Rowe.	Williams, D.
Coker.	Mattern.		

Laboratory Work: Professor BROOKS, Professor HOWELL, Dr. ANDREWS, Dr. DREYER, Dr. LEFEVRE. Daily, 9 a. m.-5 p. m. (90).

Abbe.	Drew.	Kyes.	Reese, A. M.
Akerman.	Duffy.	Lamb.	Renouf, V. A.
Allen.	Eggers.	Lazenby.	Rogers.
Anderson.	Evans, H. C.	Lehr.	Rowe.
Austin.	Fairbank.	L'Engle.	Rusk.
Ballard.	Farrar.	Lewis.	Sabin.
Beale, A. E.	Ferguson.	Little, H. W.	Scholl.
Berger.	Fisher, A. L.	MacCallum.	Smith, R. M.
Bettman.	Fisher, W. A.	Marvell.	Sowers.
Browne, B. B.	Fletcher.	Mattern.	Stein, L. D.
Brülle.	Flint.	Meisenhelder.	Stone, E. A.
Burnam.	Francis, W. W.	Meltzer.	Sudler.
Burrell.	Grave.	Miller, F. O.	Thayer, L. H.
Canter.	Greene, C. W.	Myers, S. B.	Thomas, R. H.
Cator.	Healy.	Myrick.	Tobin.
Chace.	Hendrickson.	Nakaseko.	Ver Planck.
Chambers.	Herrick.	Norris, R. S.	Walden.
Chittenden.	Hewlett.	Odell.	Warren, M.
Christian.	Hirshberg.	Palmer, E. L.	West, J. M.
Coker.	Howe.	Purcell.	Williams, D.
Crane.	Johnson, D. S.	Reed, D. M.	Wooldridge.
Dancy.	Jungbluth, M.		Woolley.
Dohme.	Kellogg.		

Greek. (45 Students).

Classes meet in McCoy Hall.

Greek Seminary: *Plato*: Professor GILDERSLEEVE. Monday and Wednesday, 10 a. m., Room 14. (17).

Burgess.	Hullihen.	Milden.	Savage.
Eckels.	Kern.	Montgomery.	Schulz.
Foster, H. B.	Kingsbury.	Penick.	Spragins.
Foushee.	Little, C. H.	Sanders, H. N.	Warner.
Hamilton.			

Introduction to Plato: Professor GILDERSLEEVE. Thursday, 10 a. m., Room 14. (24).

Basore.	Green, E. L.	Land.	Penick.
Burgess.	Hamilton.	Little, C. H.	Sanders, H. N.
Eckels.	Hullihen.	Maguire.	Savage.
Foster, H. B.	Jones, T. M.	Milden.	Schulz.
Foushee.	Kern.	Montgomery.	Spragins.
Gill.	Kingsbury.	Ness.	Warner.

Practical Exercises: Professor GILDERSLEEVE. Tuesday and Friday, 10 a. m., Room 14. (17).

Burgess.	Hullihen.	Milden.	Savage.
Eckels.	Kern.	Montgomery.	Schulz.
Foster, H. B.	Kingsbury.	Penick.	Spragins.
Foushee.	Little, C. H.	Sanders, H. N.	Warner.
Hamilton.			

Plato's Republic: Dr. MILLER. Tuesday and Thursday, 9 a. m., Room 15. (15).

Burgess.	Hamilton.	Montgomery.	Schulz.
Eckels.	Kern.	Penick.	Spragins.
Foster, H. B.	Kingsbury.	Sanders, H. N.	Warner.
Foushee.	Milden.	Savage.	

Demosthenes, 54, 55; Dion Chrysostom, The Hunters of Euboea: (*Undergraduate Elective*): Dr. SPIEKER. Thursday, 12 m., Friday, 1 p. m., Room 12. (2).

Harry, P. W.	Pyle.
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Plato, Phaedo: (*Major Course*): Dr. SPIEKER. Monday, Tuesday, Wednesday, 12 m., Room 10. (6).

Bogue.	French.	Ross.	Spilman.
Fisher, F. C.	King, J. H.		

Andocides, de Mysteries: (*Minor Course*): Dr. SPIEKER. Tuesday, Wednesday, Thursday, 1 p. m., Room 10. (10).

Anderson.	Eager.	Purcell.	Shriver.
Burrell.	Ewell.	Ramsay.	Wight.
Chambers.	Griffin, J. W.		

Homer; Herodotus; Prose Composition: Dr. MILLER. Monday, 10 a. m.; Thursday and Friday, 1 p. m., Room 8. (3).

Bernheim.	Constantine.	Snively, G. E.
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Prose Composition: Dr. SPIEKER.

Major Course: Friday, 12 m., Room 10. (7).

Bogue.	French.	Montgomery.	Spilman.
Fisher, F. C.	King, J. H.	Ross.	

Minor Course: Monday, 1 p. m., Room 10. (10).

Anderson.	Eager.	Purcell.	Shriver.
Burrell.	Ewell.	Ramsay.	Wight.
Chambers.	Griffin, J. W.		

Latin. (71 Students).

Classes meet in McCoy Hall.

Latin Seminary: *Plautus and Terence:* Professor WARREN. Tuesday and Friday, 11 a. m., Room 15. (20).

Basore.	Gill.	Jones, T. M.	Sanders, H. N.
Burgess.	Glascok.	Little, C. H.	Savage.
Daniel.	Hamilton.	Lyon.	Schulz.
Foster, H. B.	Hoeing.	Maguire.	Spragins.
Foushee.	Hullihen.	Milden.	Warner.

Roman Comedy: Professor WARREN. Monday, 11 a. m., Room 15. (23).

Basore.	Gill.	Little, C. H.	Sanders, H. N.
Burgess.	Glascok.	Lyon.	Savage.
Daniel.	Hamilton.	Maguire.	Schulz.
Eckels.	Hoeing.	Milden.	Spragins.
Foster, H. B.	Hullihen.	Ness.	Warner.
Foushee.	Jones, T. M.	Penick.	

Latin Inscriptions: Professor WARREN. Thursday, 11 a. m., Room 15. (21).

Basore.	Glascok.	Jones, T. M.	Sanders, H. N.
Burgess.	Green, E. L.	Little, C. H.	Schulz.
Daniel.	Hamilton.	Lyon.	Spragins.
Foster, H. B.	Hoeing.	Maguire.	Warner.
Foushee.	Hullihen.	Milden.	Wilson, H. L.
Gill.			

Aulus Gellius: Professor WARREN. Wednesday, 11 a. m., Room 15. (18).

Basore.	Gill.	Little, C. H.	Sanders, H. N.
Burgess.	Hamilton.	Lyon.	Schulz.
Daniel.	Hoeing.	Maguire.	Spragins.
Foster, H. B.	Hullihen.	Milden.	Warner.
Foushee.	Jones, T. M.		

Journal Club: Professor WARREN. Alternate Thursdays, 12 m., Room 15. (15).

Basore.	Gill.	Little, C. H.	Schulz.
Burgess.	Hoeing.	Maguire.	Spragins.
Daniel.	Hullihen.	Milden.	Warner.
Foushee.	Jones, T. M.	Sanders, H. N.	

Pro-Seminary: Dr. SMITH. Monday, 9 a. m., Room 15. (7).

Burgess.	Little, C. H.	Schulz.	Warner.
Foster, H. B.	Lyon.	Spragins.	

Juvenal: (*Major Course*): Dr. SMITH. Wednesday, Thursday, and Friday, 10 a. m., Room 10. (14).

Bogue.	French.	Kalb, J. A.	Ross.
Chambers.	Gemmell.	King, J. H.	Smith, V. E.
Davidson.	Greene, J. D.	Ramsay.	Spilman.
Fisher, F. C.	Jones, R. H.		

Roman Literature: (*Minor Course*): Dr. SMITH. Tuesday, 9 a. m., Room 11. (15).

Beewkes, C. J.	Hill, H. D.	Loeb.	Schermerhorn.
De Grange.	Hill, J. P.	Marshall, T. H.	Stephens, C. G.
Francis, W. W.	Kaufman, H.	Moore, J. S.	Wingert.
Heyman.	Lindheim.	Peters.	

Livy: (*Minor Course*): Dr. WILSON. Wednesday, Thursday, Friday, 9 a. m., Room 12. (24).

Anderson.	Ewell.	Kaufman, H.	Purcell.
Beewkes, C. J.	Francis, W. W.	Lindheim.	Roulston.
Burrell.	Griffin, J. W.	Loeb.	Schermerhorn.
Clark, C. T.	Heyman.	Marshall, T. H.	Stephens, C. G.
De Grange.	Hill, H. D.	Moore, J. S.	Wight.
Eager.	Hill, J. P.	Peters.	Wingert.

Cicero; Sallust; Prose Composition: Dr. WILSON. Wednesday, Thursday, Friday, 10 a. m., Room 8. (9).

Bernheim.	Crummer.	Snively, G. E.
Brady, J. H.	Diggs.	Flinn.
Constantine.		Whitman.

Prose Composition:

Major Course: Dr. SMITH. Monday, 10 a. m., Room 10. (14).

Bogue.	French.	Kalb, J. A.	Ross.
Chambers.	Gemmell.	King, J. H.	Smith, V. E.
Davidson.	Greene, J. D.	Ramsay.	Spilman.
Fisher, F. C.	Jones, R. H.		

Minor Course: Dr. WILSON. Tuesday, 9 a. m., Room 12. (9).

Anderson.	Eager.	Griffin, J. W.	Roulston.
Burrell.	Ewell.	Purcell.	Wight.
Clark, C. T.			

Sanskrit and Comparative Philology. (40 Students).

Classes meet in Room 19, McCoy Hall.

Comparative Philology: (*Lectures on the Ethnology of the Indo-European Peoples*): Professor BLOOMFIELD. Monday, 4 p. m. (17).

Barnett.	Foster, H. B.	Hodges, C. S.	Nitze.
Brush.	Frank, S. W.	Jones, R. H.	Pyle.
Campbell.	Greenbaum.	Jones, T. M.	Radcliffe.
Drewry.	Harry, P. W.	Miller, A. D.	Smith, V. E.
Eiesland.			

Comparative Grammar of the Indo-European Languages: (*Noun-Formation*): Professor BLOOMFIELD. Thursday, 4 p. m. (18).

Basore.	Green, E. L.	Kingsbury.	Milden.
Blake.	Grimm.	Kurrelmeyer, W.	Montgomery.
Burgess.	Hamilton.	Land.	Ness.
Eckels.	Jones, T. M.	Maguire.	Penick.
Foushee.	Kern.		

Lithuanian Language and Literature: Professor BLOOMFIELD. Tuesday, 4 p. m. (5).

Blake.	Green, E. L.	Kurrelmeyer, W.	Ness.
Bolling.			

Vedic Seminary: (*Brāhmaṇas and Upaniṣads*): Professor BLOOMFIELD. Friday, 4 p. m. (9).

Basore.	Green, E. L.	Kern.	Ness.
Blake.	Hamilton.	Milden.	Sanders, H. N.
Foushee.			

Introduction to the Language of the Avesta: Mr. NESS. Thursday, 3 p. m. (2).

Blake.	Grimm.
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Advanced Sanskrit: (*Hitopadeśa and Manu*): Professor BLOOMFIELD. Wednesday, 12 m. (8).

Basore.	Foushee.	Kern.	Sanders, H. N.
Blake.	Hamilton.	Milden.	Savage.

Elementary Sanskrit: Professor BLOOMFIELD. Monday and Friday, 12 m. (7).

Foster, H. B.	Huguenin.	Maguire.	Spragins.
Grimm.	Kurrelmeyer, W.	Schulz.	

Oriental Seminary. (55 Students).

Classes meet in the Dillmann Library, McCoy Hall, Room 18, unless otherwise stated.

Critical Interpretation of Selected Chapters of the Authorized Version: (*The Early Narratives of Genesis*): Professor HAUP. Wednesday, 5 p. m., McCoy Hall, Room 24. (42).

Abbe.	Griffin, N. E.	Land.	Parham.
Ballard.	Grimm.	Lee.	Rothermel.
Barr.	Guttmacher.	Leonard.	Rowe.
Becker.	Hagen.	McPherson.	Ryland.
Butler.	Hall, C. M.	Miller, R. D.	Sommerville.
Caldwell.	Heald.	Motley.	Stearns.
Campbell, K.	Howard.	Ness.	Sumwalt.
Cantey.	Huguenin.	Norris, R. S.	West, H. S.
Edmunds.	Jewell.	O'Harra.	Wharey.
Fassig.	Kaufman, H.	Paine.	Wingert.
Glenn.	Kurrelmeyer.		

Elementary Hebrew: (*Gesenius-Mitchell's Hebrew Grammar; Genesis, ed. Baer-Delitzsch*): Professor HAUP. Wednesday, 3-5 p. m. (5).

Frank, S. W.	Grimm.	Heald.	McPherson.
Gardner.			

Hebrew: (*Second Year's Course: Interpretation of the Book of Judges*): Professor HAUP. Monday, 4 p. m. (13).

Blake.	Land.	Rosenau.	Sumwalt.
Caldwell.	Mahoney.	Schanfarber.	Tracy.
Grimm.	McPherson.	Stearns.	Weaver, E. E.
Guttmacher.			

Hebrew Exercises: (*Cursory Reading of the Book of Isaiah*): Dr. JOHNSTON. Thursday, 9-11 a. m. (3).

Grimm.	Mahoney.	Tracy.
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Exercises in Reading Hebrew at Sight: (*Historical Books*): Dr. JOHNSTON. Friday, 12 m. (5).

Blake.	McPherson.	Sumwalt.	Weaver, E. E.
Caldwell.			

Hebrew Prose Composition: (*Translating from English into Hebrew*): Professor HAUPT. Monday, 3.30 p. m. (12).

Blake.	Gutmacher.	McPherson.	Sumwalt.
Caldwell.	Land.	Rosenau.	Tracy.
Grimm.	Mahoney.	Schanfarber.	Weaver, E. E.

Comparative Hebrew Grammar: Professor HAUPT. Tuesday, 3 p. m. (10).

Blake.	Gutmacher.	Rosenau.	Sumwalt.
Caldwell.	Land.	Schanfarber.	Weaver, E. E.
Grimm.	McPherson.		

Hebrew: (*Advanced Course: Critical Interpretation of the Book of Isaiah, Chapters i-xxxix*): Professor HAUPT. Monday, 5 p. m. (13).

Caldwell.	Land.	Rosenau.	Sumwalt.
Cantey.	Mahoney.	Schanfarber.	Tracy.
Grimm.	McPherson.	Sommerville.	Weaver, E. E.
Gutmacher.			

Critical Interpretation of the Aramaic Portions of the Books of Daniel and Ezra: Professor HAUPT. Tuesday, 4 p. m. (9).

Caldwell.	Land.	Rosenau.	Sumwalt.
Grimm.	McPherson.	Schanfarber.	Weaver, E. E.
Gutmacher.			

Syriac: (*Roediger's Chrestomathy*): Dr. JOHNSTON. Friday, 11 a. m. (3).

Grimm.	Land.	Sumwalt.
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Arabic for Beginners: (*Socin's Grammar*): Dr. JOHNSTON. Wednesday, 10 a. m. (2).

McPherson.	Sumwalt.
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Selections from the Arabian Nights: Dr. JOHNSTON. Tuesday, 9-11 a. m. (5).

Grimm.	Land.	Rosenau.	Schanfarber.
Gutmacher.			

Arabic Prose Composition: (*Translating from English into Arabic*): Professor HAUPT. Monday, 3 p. m. (7).

Blake.	Gutmacher.	Rosenau.	Sumwalt.
Grimm.	Land.	Schanfarber.	

Assyrian for Beginners: (*Meissner's Chrestomathy*): Dr. JOHNSTON. Wednesday, 11 a. m. (2).

McPherson.	Sumwalt.
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Assyrian Historical Texts: Dr. JOHNSTON. Tuesday, 11 a. m. (2).

Grimm.	Land.
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Sumerian: (*Bilingual Incantations*): Professor HAUPT. Tuesday, 5 p. m. (2).

Grimm.	Land.
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History of Assyria and Babylonia: Dr. JOHNSTON. Friday, 10 a. m. (13).

Benton.	Kaye.	McPherson.	Sioussat.
Caldwell.	Land.	Paine.	Sumwalt.
Cantey.	Lee.	Schmeckebier.	Weaver, C. C.
Grimm.			

German. (116 Students).

Classes meet in McCoy Hall.

(Advanced Courses.)**German Seminary:** *Goethe's Lyrical Poems*: Professor WOOD. Tuesday, Thursday, and Friday, 9 a. m., Room 4. (10).

Blake.	Glascok.	Lyon.
Brown, G. D.	Hofmann.	Little, C. H.
Farr.	Hullihen.	Wharey.

Germanic Society: Professor WOOD. Fortnightly, Friday, 8 p. m. (18).

Becker.	Glascok.	Jones, T. M.	Ness.
Blake.	Hagen.	Kurrelmeyer, W.	Nitze.
Brown, G. D.	Heald.	Little, C. H.	Wharey.
Campbell, K.	Hofmann.	Lyon.	Wilkins.
Farr.	Hullihen.		

Gothic: Professor WOOD. Wednesday and Friday, 10 a. m., Room 4. (8).

Blake.	Glascok.	Heald.	Parham.
Eiesland.	Hagen.	Lyon.	West, H. S.

Old Saxon: Heliand: Professor WOOD. Tuesday and Friday, 11 a. m., Room 3. (5).

Becker.	Hofmann.	Kurrelmeyer, W.	Ness.
Campbell, K.			

Schiller's Dramas: Professor WOOD. Wednesday, 9 a. m., Room 4. (9).

Glascok.	Kurrelmeyer, W.	Lyon.	Nitze.
Hofmann.	Little, C. H.	Miles.	Wharey.
Hullihen.			

Middle High German: Dr. Vos. Monday and Tuesday, 1 p. m., Room 8. (7).

Blake.	Farr.	Hagen.	Lyon.
Eiesland.	Glascok.	Heald.	

Modern Dutch: Dr. Vos. Monday and Wednesday, 11 a. m., Room 6. (3).

Blake.	Hofmann.	Kurrelmeyer, W.
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The German Novel in the XVIII and XIX Centuries: Dr. BAKER. Tuesday and Friday, 12 m., Room 12. (3).

Becker.	Jones, T. M.	Little, C. H.
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(Major Course.)**Scherer, History of German Literature:** Dr. Vos. Monday. **Lessing, Nathan der Weise:** Dr. Vos. Wednesday and Friday. **Prose Composition:** Professor WOOD and Dr. BAKER. Thursday, 10 a. m., Room 6. (7).

Baetjer, H.	Haskell.	Miles.	Smull.
Farr.	Keidel, A.	Powell.	

(Minor Course A.)**Prose Composition:** Professor WOOD. Monday. **Prose Readings and Classics:** Dr. Vos. Tuesday, Thursday, and Friday, 11 a. m., Room 11. (27).

Bouchelle.	Greene, J. D.	Loeb.	Smith, W. L.
Breed.	Heyman.	Mackall.	Stephens, C. G.
Eager.	Hill, H. D.	Peters.	Tobin.
Ember.	Hill, J. P.	Roulston.	Turnbull.
Flinn.	Hyde, E. P.	Rous.	White.
Foster, F.	King, T. H.	Routh.	Winslow.
De Grange.	Lazenby.	Schermerhorn.	

(Minor Course B.)**Dr. BAKER.** Daily, except Wednesday, 11 a. m., Room 8. (22).

Brooks, C. E.	Geraghty.	McAll.	Shriver.
Clark, C. T.	Griffin, J. W.	Moore, J. S.	Smith, S. P.
Ewell.	Kaufman, H.	Motley.	Wingert.
Fisher, F. C.	Kerr.	Murkland.	Wirt.
Ford.	Lindheim.	Rogers.	Wright, H. C.
Francis, I. H.	Marshall, T. H.		

Elementary German: (*Thomas's Practical German Grammar*): Dr. Vos. Tuesday, Wednesday, and Friday, 9 a. m., Room 6. (7).

Abercrombie.	Constantine.	Morrison.	Whitman.
Bernheim.	Diggs.	Snively, G. E.	

German Conversation: Dr. HOFMANN. Tuesday, 5 p. m., Room 8. (13).

Davidson.	Francis, W. W.	Hagen.	Miles.
Duffy.	Frank, S. W.	Hall, C. M.	Siff.
Farr.	Greenbaum.	Meisenhelder.	Williams, D.
Fosnocht.			

(Elective Courses.)**Contemporary Readings:** Dr. BAKER. Monday, 9 a. m., Tuesday, 10 a. m., Room 8. (16).

Browne, B. B.	Fischer, J. S.	Gordon.	Kalb, C. W.
Clunet.	Fosnocht.	Greenbaum.	Smith, F. M.
Cook, H. W.	Francis, W. W.	Hammond.	Smith, R. M.
Dieffenbach.	Frank, S. W.	Hodges, C. S.	Stidman.

Scientific Readings: Dr. BAKER. Thursday, 12 m., Friday, 1 p. m., Room 6. (5).

Dohme.	Kershner.	Scholl.	Straus.
Hirshberg.			

Scientific German: (*For Graduate Students*): Dr. HOFMANN. Monday and Thursday, 5 p. m., Room 8. (10).

Hall, C. M.	Pender.	Rowe.	Walden.
Howe.	Potts.	Siff.	Williams, D.
Meisenhelder.	Reese, H. M.		

English. (131 Students).

Classes meet in McCoy Hall.

English Seminary: (*The poetry of Cynewulf and of his period*): Professor BRIGHT. Tuesday and Thursday, 3-5 p. m., Room 4. (12).

Barr.	Campbell, K.	Hagen.	Parham.
Becker.	Farr.	Heald.	West, H. S.
Brown, G. D.	Griffin, N. E.	Huguenin.	Wharey.

English Versification: (*Lectures*): Professor BRIGHT. Wednesday, 4 p. m., Thursday, 12 m. (13).

Barr.	Farr.	Heald.	Parham.
Becker.	Griffin, N. E.	Huguenin.	West, H. S.
Brown, G. D.	Hagen.	Miles.	Wharey.
Campbell, K.			

Plays of Shakespeare: Professor BRIGHT. Tuesday, 12 m., Room 12. (13).

Barr.	Farr.	Heald.	Parham.
Becker.	Griffin, N. E.	Huguenin.	West, H. S.
Brown, G. D.	Hagen.	Miles.	Wharey.
Campbell, K.			

Journal Meeting: Professor BRIGHT. Alternate Fridays, 8-10 p. m. Room 4. (14).

Barr.	Farr.	Huguenin.	Shipley.
Becker.	Griffin, N. E.	Miles.	West, H. S.
Brown, G. D.	Hagen.	Parham.	Wharey.
Campbell, K.	Heald.		

Anglo-Saxon: (Major Course): Professor BRIGHT. Monday and Wednesday, 12 m., Room 8. (4).

Browne, B. B. Jones, A. D. Miles. Stidman.

The English Drama from Dryden to Sheridan: (Lectures): Professor BROWNE. Wednesday, 11 a. m., Room 8. (12).

Barr. Campbell, K. Heald. Parham.
Becker. Farr. Huguenin. West, H. S.
Brown, G. D. Griffin, N. E. Miles. Wharey.

Elizabethan Literature; Early Scottish Poets: (Major Course): Professor BROWNE. Tuesday and Friday, 12 m., Room 8. (3).

Browne, B. B. Jones, A. D. Stidman.

Early English Texts; English Literature: (Minor Course): Professor BROWNE. Daily, except Friday, 1 p. m., Room 6. (14).

Ballard. Greenbaum. Hill, H. D. Murkland.
Cator. Hanna. Hubner. Peters.
Clunet. Harry, P. W. Lazenby. Smith, V. E.
Duffy. Harwood.

English Literature: (Undergraduate Elective): Professor GREENE. Thursday, 12 m., Friday, 1 p. m., Room 9. (9).

Ballard. Jones, R. H. Palmer, J. H. Renouf, V. E.
Browne, B. B. Miller, F. O. Ramsay. Seth.
Hammond.

English Literature: (Required Undergraduate Course): Professor GREENE. Monday, 9 a. m., Tuesday, 10 a. m., Wednesday, 11 a. m., Room 11. (40).

Bogue. Gemmill. Keidel, A. Robinson, G. C.
Brady, J. H. Grimes. King, J. H. Ross.
Bruce. Guggenheimer. Knapp. Smull.
Chambers. Hanna. Krager. Spilman.
Crummer. Haskell. Lazenby. Talty.
Downes. Jones, T. D. Morgan. Taveau.
Fisher, F. C. Joyner. Mullen. Thomas, R. H.
Fooks. Jungbluth, K. Ramsay. Verplanck.
French. Jungbluth, M. Remsen, C. M. Werber.
Gaddess. Kalb, J. A. Reymann. Whitman.

Rhetoric and English Composition: Professor GREENE. Monday, Tuesday, Wednesday, 12 m., Room 11. (58).

Abercrombie. Donaldson. Kaufman, H. Rous.
Altvater. Eager. Kerr. Routh.
Anderson. Ewell. King, T. H. Schermerhorn.
Baetjer, H. Foster, F. Liddell. Shriver.
Beeuwkes, C. J. Foutz. Lindheim. Smith, S. P.
Bernheim. Francis, I. H. Loeb. Smith, W. L.
Bouchelle. Glaser. Mackall. Stephens, C. G.
Brady, J. H. Gminder. Marshall, T. H. Taneyhill.
Freed. Greene, J. D. McAll. White.
Brooks, C. E. Griffin, J. W. Moore, J. S. Wight.
Burrell. Heyman. Morrison. Wingert.
Clark, C. T. Hill, H. D. Powell. Winslow.
Constantine. Hill, J. P. Purcell. Wirt.
De Grange. Hyde. Roulston. Wright, H. C.
Diggs. James, R.

Romance Languages. (77 Students).

Classes meet in McCoy Hall.

(Advanced Courses.)

Romance Seminary: Fables of Marie de France: Professor ELLIOTT. Tuesday, 11 a. m.-1 p. m., Room 2. (8).

Baxter. Brush. Kuersteiner. Shaw.
Brownell, G. G. Frein. Nitze. Wilson, R. H.

French Dialects: Professor ELLIOTT. Monday, 11 a. m., Room 2. (6).

Baxter. Holden. Shaw. Wilson, R. H.
Frein. Kuersteiner.

French Philology: Dr. ARMSTRONG. Monday, 10 a. m., Wednesday, 9 a. m., Friday, 11 a. m., Room 2. (8).

Brush. Hagen. Kuersteiner. Parham.
Frein. Holden. Nitze. Teillard.

French Physiological Phonetics: Dr. ARMSTRONG. Tuesday, 10 a. m., Room 2. (8).

Farr. Hagen. Nitze. Teillard.
Glascok. Lyon. Parham. Wharey.

Old French Readings: Dr. ARMSTRONG. Monday and Wednesday, 3 p. m., Room 2. (8).

Brush. Glascok. Lyon. Shaw.
Farr. Hagen. Parham. Wharey.

French Criticism: Dr. OGDEN. Thursday, 12 m., Room 2. (7).

Brownell, G. G. Glascok. Lyon. Shaw.
Frein. Kuersteiner. Nitze.

Historical French Syntax: Mr. R. H. WILSON. Monday and Tuesday, 9 a. m., Room 2. (7).

Armstrong, E. C. Frein. Ogden. Teillard.
Brush. Nitze. Shaw.

Popular Latin: Professor ELLIOTT. Monday, 12 m., Room 2. (6).

Brush. Holden. Shaw. Wilson, R. H.
Frein. Kuersteiner.

Dante: Professor ELLIOTT. Wednesday, 12 m., Room 2. (2).

Kuersteiner. Wilson, R. H.

Spanish Seminary: Dr. MARDEN. Thursday, 10 a. m., Room 2. (2).

Brownell, G. G. Kuersteiner.

Spanish Epic Poetry: Dr. MARDEN. Friday, 12 m., Room 2. (3).

Brownell, G. G. Kuersteiner. Shaw.

Old Spanish Readings: Dr. MARDEN. Monday, 10 a. m., Room 6. (3).

Brownell, G. G. Holden. Kuersteiner.

Spanish Philology: Dr. MARDEN. Wednesday and Friday, 10 a. m., Room 2. (2).

Brownell, G. G. Kuersteiner.

Romance Club: Professor ELLIOTT. Wednesday, 11 a. m., Room 2. (12).

Armstrong, E. C. Brush. Keidel, G. C. Ogden.
Baxter. Frein. Marden. Shaw.
Brownell, G. G. Kuersteiner. Nitze. Wilson, R. H.

Methodology of the Romance Languages: Dr. KEIDEL.

This course begins January 1, 1898.

(Undergraduate Courses.)

Italian: (Minor Course): Dr. RAMBEAU. Daily, except Monday, 9 a. m., Room 7. (3).

Clarke, G. M. Jones, A. D. Kurrelmeyer, H.

Italian: (Undergraduate Elective): Mr. BAXTER. Monday, 9 a. m., Thursday, 12 m., Room 6. (3).

Fitzgerald. Jones, R. H. Stearns.

Spanish: (Minor Course): Dr. MARDEN. Daily, except Monday, 9 a. m., Room 8. (5).

Davidson. Joyner. Krager. Reymann.
Guggenheimer.

Spanish: (Undergraduate Elective): Mr. KUERSTEINER. Monday, 9 a. m., Thursday, 12 m., Room 4. (1).

Clarke, G. M.

French: (Major Course): Dr. RAMBEAU. Daily, except Tuesday, 10 a. m., Room 7. (8).

Dohme. Morgan. Palmer, J. H. Stidman.
Grimes. Mullen. Siff. Wharey.

French: (Minor Course A): Dr. RAMBEAU. Daily, except Thursday, 12 m., Room 7. (19).

Crummer. Hagen. Kalb, J. A. Tobin.
Davidson. Harry, P. W. Keidel, A. Werber.
Ember. Harwood. Kurrelmeyer, H. Whitman.
Fosnocht. Jones, R. H. Miller, R. D. Wright, H. C.
Frank, S. W. Jones, T. D. Smull.

French: (Minor Course B): Dr. OGDEN. Daily, except Thursday, 12 m., Room 6. (15).

Benton. Hodges, C. S. Remsen, C. M. Stephens, J. C.
Bruce. Knapp. Smith, V. E. Walden.
Gorsuch. Pyle. Snively, C. Weaver, C. C.
Ramsay. Stearns.

French: (Undergraduate Elective): Dr. ARMSTRONG. Monday, 9 a. m., Room 10; Friday, 1 p. m., Room 2. (11).

Bestor. Kennard. McIntosh. Stewart, W. P.
Brent. Lehr. Miles. Turnbull.
Fowler, L. H. Little, C. H. Robinson, E. A.

French: (Elements): Mr. KUERSTEINER. Tuesday, Thursday, and Friday, 9 a. m., Room 10. (3).

Greene, J. D. Homer. Meisenhelder.

History, Economics, and Politics. (124 Students).

Classes meet in McCoy Hall.

Historical Seminary: Professor ADAMS. Fortnightly, Friday, 8-10 p. m., Room 25. (24).

Adams, T. S. Drewry. Lee. Sioussat.
Barnett. Ewing. Motley. Smith, E. A.
Benton. Garrett, R. Myers, W. S. Snively, C.
Brough. Jones, F. R. Paine. Sommerville.
Campbell, H. Kaye. Radcliffe. Thom.
Cantey. Latané. Schmeckebier. Weaver, C. C.

History of Civilization: (Major Course): Professor ADAMS. Monday and Tuesday, 11 a. m., Room 24. (40).

Barnett. Gaddess. Joyner. Norris, H. C.
Bogue. Gemmill. Jungbluth, K. Paine.
Campbell, H. Glaser. Kalb, J. A. Rayner.
Davidson. Green, E. L. Knapp. Reymann.
Downes. Grimes. Krager. Rickey.
Drewry. Guggenheimer. Kurrelmeyer, H. Taneyhill.
Ensor. Hanna. Levering. Taylor.
Fooks. Harwood. Morgan. West, H. S.
Forney. Haskell. Mullen. Willms.
Frank, S. W. Jones, T. D. Myers, W. S. Wright, A.

Roman Politics: Professor ADAMS. Wednesday and Thursday, 11 a. m., Room 25. (22).

Barnett.	Ewing.	Motley.	Sioussat.
Benton.	Garrett, J. W.	Myers, W. S.	Snively, C.
Campbell, H.	Garrett, R.	Radcliffe.	Sommerville.
Cantey.	Green, E. L.	Schloegel.	Thom.
Dennis.	Kaye.	Schmeckebier.	Weaver, C. C.
Drewry.	Lee.		

Nineteenth Century: Professor ADAMS. Friday, 11 a. m., Room 25. (24).

Barnett.	Drewry.	Lee.	Sioussat.
Benton.	Ensor.	Motley.	Snively, C.
Caldwell.	Ewing.	Myers, W. S.	Sommerville.
Campbell, H.	Garrett, R.	Paine.	Thom.
Cantey.	Green, E. L.	Radcliffe.	Weaver, C. C.
Dennis.	Kaye.	Schmeckebier.	West, H. S.

Historical Method: Dr. VINCENT. Tuesday and Thursday, 10 a. m., Room 23. (18).

Adams, T. S.	Dennis.	Radcliffe.	Snively, C.
Barnett.	Drewry.	Schloegel.	Sommerville.
Benton.	Ewing.	Schmeckebier.	Thom.
Campbell, H.	Kaye.	Sioussat.	Weaver, C. C.
Cantey.	Motley.		

Historical Conference: Dr. VINCENT. Fortnightly, Saturday, 8-10 p. m. (9).

Adams, T. S.	Motley.	Sioussat.	Thom.
Benton.	Schmeckebier.	Sommerville.	Weaver, C. C.
Kaye.			

European History: (Major Course): Dr. VINCENT. Thursday and Friday, 11 a. m., Room 24. (30).

Bogue.	Grimes.	Kalb, J. A.	Mullen.
Davidson.	Guggenheimer.	Knapp.	Norris, H. C.
Downes.	Hanna.	Krager.	Rayner.
Fooks.	Harwood.	Kuersteiner.	Reymann.
Frank, S. W.	Haskell.	Kurlemeyer, H.	Rickey.
Gaddess.	Jones, T. D.	Levering.	Taneyhill.
Gemmell.	Joyner.	Morgan.	Wright, A.
Glaser.	Jungbluth, K.		

Historical Politics: (History-Economics): Dr. VINCENT. Monday and Wednesday, 10 a. m., Room 23. (25).

Bestor.	Harry, P. W.	Myers, S. B.	Taveau.
Clunet.	Hodges, C. S.	Pender.	Ver Planck.
Ferguson.	Homer.	Pyle.	Werber.
Fischer, J. S.	Kurlemeyer, H.	Renouf, V. A.	Woodbridge.
Fosnocht.	Lucke.	Scholl.	Wright, A.
Fowler, L. H.	Murkland.	Straus.	Young.
Greenbaum.			

Municipal Government: Dr. BALLAGH. Thursday, 12 m., Room 20. (7).

Adams, T. S.	Schloegel.	Sioussat.	Weaver, C. C.
Cantey.	Schmeckebier.	Sommerville.	

General History Examinations: Dr. BALLAGH. Tuesday, 9 a. m., Room 20. (3).

Kaye.	Lee.	Sommerville.
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Greek and Roman History: (Minor Course): Dr. BALLAGH. Daily, except Tuesday, 10 a. m., Room 20. (15).

Beuwkes, C. J.	Hill, J. P.	Moore, J. S.	Shriver.
Clark, C. T.	Lindheim.	Peters.	Stephens, C. G.
De Grange.	Loeb.	Roulston.	Wingert.
Heyman.	Marshall, T. H.	Schermerhorn.	

Economic Seminary: Dr. SHERWOOD and Dr. HOLLANDER. Thursday, 4-6 p. m., Room 21. (7).

Adams, T. S.	Brough.	Radcliffe.	Smith, E. A.
Barnett.	Campbell, H.	Schloegel.	

Modern Banking: Dr. SHERWOOD. Thursday and Friday, 9 a. m., Room 24. (18).

Adams, T. S.	Cantey.	Paine.	Sioussat.
Barnett.	Drewry.	Radcliffe.	Smith, E. A.
Benton.	Garrett, R.	Schloegel.	Snively, C.
Brough.	Motley.	Schmeckebier.	Sommerville.
Campbell, H.	Myers, W. S.		

Economic Sociology: Dr. SHERWOOD. Monday, 9 a. m., Room 24. (13).

Adams, T. S.	Cantey.	Motley.	Schmeckebier.
Barnett.	Drewry.	Paine.	Smith, E. A.
Brough.	Kaye.	Radcliffe.	Sommerville.
Campbell, H.			

Interpretation of Ricardo: Dr. HOLLANDER. Tuesday and Wednesday, 9 a. m., Room 24. (8).

Adams, T. S.	Benton.	Campbell, H.	Schloegel.
Barnett.	Brough.	Radcliffe.	Smith, E. A.

Recent Economic Changes: (Undergraduate Elective): Dr. HOLLANDER. Thursday, 12 m., Friday, 1 p. m., Room 21. (8).

Drewry.	Myers, S. B.	Morgan.	Taylor.
Garrett, R.	Myers, W. S.	Schloegel.	Ulman.

History of Economics: Dr. HOLLANDER. Monday and Wednesday, 10 a. m., Room 24. (22).

Cook, H. W.	Guggenheimer.	Kaufman, H.	Reymann.
Dieffenbach.	Hammond.	Kennard.	Rickey.
Downes.	Hanna.	Knapp.	Stearns.
Fooks.	Jones, T. D.	Krager.	Talty.
Frank, S. W.	Joyner.	Levering.	Willms.
Gaddess.	Jungbluth, K.		

Elements of Economics: Dr. SHERWOOD. Thursday and Friday, 10 a. m., Room 24. (53).

Bestor.	Gaddess.	Kaufman, H.	Rayner.
Clunet.	Greenbaum.	Kennard.	Renouf.
Cook, H. W.	Guggenheimer.	Knapp.	Reymann.
Dieffenbach.	Hammond.	Krager.	Rickey.
Dohme.	Hanna.	Kurlemeyer, H.	Scholl.
Downes.	Harry, P. W.	Lehr.	Stearns.
Ferguson.	Harwood.	Levering.	Straus.
Fischer, J. S.	Hines.	Lucke.	Talty.
Fitzgerald.	Hodges, C. S.	Miller, R. D.	Taveau.
Fooks.	Homer.	Murkland.	Werber.
Forney.	Jones, T. D.	Norris, H. C.	Woodbridge.
Fosnocht.	Joyner.	Pender.	Wright, A.
Fowler, L. H.	Jungbluth, K.	Pyle.	Young.
Frank, S. W.			

American Public Law: Dr. WILLOUGHBY. Monday and Tuesday, 11 a. m., Room 20. (13).

Adams, T. S.	Kaye.	Schloegel.	Sommerville.
Benton.	Lee.	Schmeckebier.	Thom.
Cantey.	Radcliffe.	Sioussat.	Weaver, C. C.
Ewing.			

History of Political Philosophy: Dr. WILLOUGHBY. Monday and Tuesday, 12 m., Room 20. (15).

Barnett.	Ensor.	Kaye.	Sioussat.
Campbell, H.	Ewing.	Myers, W. S.	Sommerville.
Cantey.	Garrett, J. W.	Paine.	Thom.
Drewry.	Garrett, R.	Schloegel.	

Political Conference: Dr. WILLOUGHBY. Fortnightly, Friday, 4-6 p. m., Room 20. (7).

Adams, T. S.	Schmeckebier.	Sommerville.	Weaver, C. C.
Kaye.	Sioussat.	Thom.	

American Political and Constitutional History: Dr. STEINER. Wednesday and Friday, 12 m., Room 24. (27).

Brent.	Gordon.	Motley.	Seth.
Clarke, G. M.	Hammond.	Myers, S. B.	Sommerville.
Dieffenbach.	Hubner.	Myers, W. S.	Stewart, W. P.
Ferguson.	Kalb, C. W.	Palmer, E. L.	Thom.
Fowler, L. H.	Kennard.	Palmer, J. H.	Ulman.
Garrett, R.	McIntosh.	Rickey.	Willms.
Gemmell.	Miller, F. O.	Robinson, E. A.	

English Constitutional Law and History: Mr. LEE. Monday and Tuesday, 12 m., Room 20. (24).

Brent.	Gordon.	Miller, F. O.	Robinson, E. A.
Clarke, G. M.	Hammond.	Myers, S. B.	Seth.
Dieffenbach.	Hubner.	Palmer, E. L.	Stewart, W. P.
Ferguson.	Kalb, C. W.	Palmer, J. H.	Talty.
Fowler, L. H.	Kennard.	Payne.	Ulman.
Gemmell.	McIntosh.	Rickey.	Willms.

Philosophy. (59 Students).

Classes meet in Room 12, McCoy Hall.

History of Philosophy: Professor GRIFFIN. Friday, 3 p. m. (9).

Cator.	Motley.	Paine.	Schanfarber.
Ewing.	Osmond.	Rosenau.	Smith, E. A.
Gutmacher.			

Deductive and Inductive Logic: until December 24: **Psychology:** January 1 to April 1; **Ethics:** after April 1: Professor GRIFFIN. Daily, 11 a. m. **Outlines of the History of Philosophy:** Weekly. (50).

Ballard.	Fowler, L. H.	Lucke.	Seth.
Bestor.	Francis, W. W.	McIntosh.	Smith, F. W.
Brent.	Gordon.	Miller, F. O.	Smith, R. M.
Browne, B. B.	Hammond.	Miller, R. D.	Smith, V. E.
Cator.	Harry, P. W.	Myers, S. B.	Stearns.
Clarke, G. M.	Hirshberg.	Osmond.	Stewart, W. P.
Cook, H. W.	Hodges, C. S.	Palmer, J. H.	Stridman.
Dieffenbach.	Hubner.	Pender.	Ulman.
Dohme.	Jones, A. D.	Pyle.	Whitehead.
Duffy.	Jones, R. H.	Renouf, V. A.	Woodbridge.
Ferguson.	Kalb, C. W.	Robinson, E. A.	Young.
Fischer, J. S.	Kennard.	Scholl.	
Fitzgerald.	Lehr.		

Drawing. (79 Students).

Classes meet in the Howard Street building, Rooms 9 and 18.

Freehand Drawing: Mr. WHITEMAN. Tuesday and Thursday, 2-5 p. m. (62).

Abercrombie.	Ember.	Kerr.	Schermerhorn.
Altvaer.	Ellwell.	Liddell.	Shriver.
Anderson.	Flinn.	Lindheim.	Smith, S. P.
Baetjer, H.	Foster, F.	Loeb.	Snively, G. E.
Beuwkes, C. J.	Foutz.	Mackall.	Stein, L. D.
Bernheim, B. M.	Francis, I. H.	Marshall, T. H.	Taneyhill.
Brady, J. H.	Glaser.	McAll.	Turnbull.
Brooks, C. E.	Gminder.	Moore, J. S.	Ver Planck.
Burrell.	Greene, J. D.	Morrison.	White.
Clark, C. T.	Griffin, J. W.	Powell.	Whitman.
Constantine.	Heyman.	Purcell.	Wight.
Crummer.	Hill, H. D.	Ramsay.	Wingert.
De Grange.	Hill, J. P.	Ross.	Winslow.
Diggs.	Homer.	Roulston.	Wirt.
Donaldson.	Hyde.	Rous.	Wright, H. C.
Eager.	James, R.		

Mechanical Drawing: Mr. GEER. Monday and Tuesday, 2-5 p. m. (17).

Armstrong, J. R. C.	Edmunds.	Haulenbeek.	Pender.
Bartell.	Everett.	Hodges, W. L.	Spencer.
Beale, R. B.	Gorsuch.	Keidel, F. B.	Stephens, J. C.
Beuwkes, R. K.	Haldeman.	Kershner.	Swaine.
Dorsey, H. G.			

Forensics and Elocution. (178 Students).

Classes meet in McCoy Hall.

Forensics: Third Year (Senate): Mr. LEE. Alternate Wednesdays, 11 a. m., Donovan Room. (52).

Ballard.	Fowler, L. H.	Lehr.	Scholl.
Bestor.	Francis, W. W.	Lucke.	Seth.
Brent.	Gordon.	McIntosh.	Smith, F. W.
Browne, B. B.	Hammond.	Miller, F. O.	Smith, R. M.
Clarke, G. M.	Harry, P. W.	Miller, R. D.	Smith, V. E.
Clunet.	Harwood.	Myers, S. B.	Stearns.
Cook, H. W.	Hirschberg.	Osmond.	Stewart, W. P.
Dieffenbach.	Hodges, C. S.	Palmer, J. H.	Stidman.
Dohme.	Hubner.	Pender.	Straus.
Duffy.	Jones, A. D.	Pyle.	Uman.
Ferguson.	Jones, R. H.	Rayner.	Whitehead.
Fischer, J. S.	Kalb, C. W.	Renouf, V. A.	Woodbridge.
Fitzgerald.	Kennard.	Robinson, E. A.	Young.

Forensics: Second Year (House of Representatives): Mr. LEE. Alternate Wednesdays, 11 a. m., Donovan Room. (51).

Armstrong, J. R. C.	Greenbaum.	King, J. H.	Robinson, G. C.
Bogue.	Greene, J. D.	Knapp.	Ross.
Bruce.	Grimes.	Krager.	Smull.
Chambers.	Guggenheimer.	Kurrelmeyer, H.	Spilman.
Davidson.	Hanna.	Lazenby.	Talty.
Downes.	Haskell.	Levering.	Taneyhill.
Fisher, F. C.	Jones, T. D.	Morgan.	Taveau.
Fooks.	Joyner.	Mullen.	Thomas, R. H.
Fosnocht.	Jungbluth, K.	Murkland.	Tobin.
Frank, S. W.	Jungbluth, M.	Palmer, E. L.	Ver Planck.
French.	Kalb, J. A.	Ramsay.	Werber.
Gaddess.	Kaufman, H.	Remsen, C. M.	Wright, A.
Gemmill.	Keidel, A.	Reymann.	

Elocution: First Year: Mr. LEE. Assembly Room.**Section I.** Monday, 9 a. m. (18).

Abercrombie.	Ewell.	Kerr.	Rous.
Adams, T. S.	Francis, I. H.	Lindheim.	Smith, S. P.
Altwater.	Glaser.	Loeb.	Uman.
Baetjer, H.	Greene, J. D.	Ramsay, R. L.	Wingert.
Beuwkes, C. J.	Heyman.		

Section II. Tuesday, 10 a. m. (18).

Clark, C. T.	Marshall, T. H.	Schermerhorn.	White.
Flinn.	McAll.	Seth.	Whitehead.
Gminder.	Moore, J. S.	Taneyhill.	Wight.
King, J. H.	Powell.	Turnbull.	Wright, H. C.
Liddell.	Rickey.		

Section III. Thursday, 12 m. (20).

Bouchelle.	Foster, F.	Jones, T. D.	Shriver.
Brady, J. H.	Foutz.	King, T. H.	Smith, W. L.
Breed.	Gaddess.	Mackall.	Ver Planck.
Burrell.	Gardner.	Morrison.	Whitman.
Donaldson.	Griffin, J. W.	Roulston.	Winslow.

Section IV. Friday, 1 p. m. (19).

Anderson.	Eager.	Hill, J. P.	Sioussat.
Brooks, C. E.	Ember.	Hyde.	Smith, V. E.
Crummer.	Fischer, J. S.	Purcell.	Wirt.
De Grange.	Grimes.	Ross.	Wright, A.
Diggs.	Hill, H. D.	Routh.	

STUDENTS IN THE JOHNS HOPKINS MEDICAL SCHOOL.**CANDIDATES FOR THE DEGREE OF M. D.****Fourth Year.** (26).

Baer, W. S.	Ford, W. W.	Lupton, F. A.	Pratt, J. H.
Calvert, W. J.	Hastings, T. W.	Madison, J. D.	Sands, G.
Cassidy, P. J.	Herrick, A. B.	Marshall, H. T.	Schenck, B. R.
Coe, J. W.	Johnstone, M. M. S.	O'Connell, D. M.	Steiner, W. R.
Cox, W.	Knox, J. H. M., Jr.	Perkins, R. G.	Walker, E. E.
Dawson, P. M.	Langfeld, M.	Porter, K.	Whitridge, A. H.
Elting, A. W.	Light, G. U.		

Third Year. (34).

Brown, L.	Evans, P. S., Jr.	Lynch, F. W.	Sampson, J. A.
Brownell, E. E.	Follis, R. H., Jr.	Magee, C. L.	Steenland, H. S.
Buckler, H. W.	Fulton, F. T.	Moore, H. M.	Stone, W. R.
Cole, R. I.	Gallagher, J. D.	Oliver, E. S.	Strobel, E. R.
Davis, F. C.	Harris, H.	Ottley, C. W.	Verhoeff, F. H.
Davis, J. S.	Hoye, H. J.	Owsley, P. O.	Williams, W. W.
Emerson, C. P.	Ladd, L. W.	Pleasants, J. H., Jr.	Wyckoff, S. D.
Epler, B. N.	Little, C. S.	Rosenheim, S.	Yates, L.
Erlanger, J.	Luetscher, J. A.		

Second Year. (44).

Akerman, J.	Dancy, W. R.	Hewlett, A. W.	Odell, A.
Allen, H. W.	Eggers, A. H.	Kellogg, W. C.	Rand, R. F.
Austin, M. F.	Evans, H. C.	Kyes, P.	Reed, D. M.
Beale, A. E.	Fairbank, R.	Lewis, W. H.	Rusk, G. Y.
Bettman, M.	Farrar, C. B.	Little, H. W.	Sabin, F. R.
Briggs, E.	Fisher, A. L.	Lowell, E. L.	Sowers, W. F. M.
Brülle, H.	Fisher, W. A., Jr.	MacCallum, J. B.	Stone, E. A.
Burnam, C. F.	Fletcher, H.	Marvell, M. W.	Thayer, L. H.
Chase, E. S.	Flint, J. M.	Meltzer, C. R.	Warren, M.
Chittenden, A. S.	Healy, W. P.	Mosher, C. D.	West, J. M.
Christian, H. A.	Hendrickson, W. F.	Myrick, H. G.	Woolley, P. G.

First Year. (63).

Adler, H. M.	Dutcher, A.	Lamson, T.	Slemmons, J. M.
Atherton, A. M.	Fowler, H. A.	Lewis, D. M.	Smith, H. M.
Baetjer, F. H.	Gay, F. P.	Long, M.	Spratt, C. N.
Baldwin, W. D.	Ghio, J. B.	Longcope, W. T.	Stein, G.
Berry, J. M.	Graham, N. D.	Lyle, A. G.	Steinfeld, A. L.
Bloombergh, H. D.	Hall, G. W.	Madden, W. H.	Swett, C. M.
Bosley, J. R.	Hamman, L. V.	Manwaring, W. H.	Ulrich, H. L.
Bunting, C. H.	Hastreiter, R. F.	McKeough, E. P.	Underhill, A. J.
Butler, J. I.	Hathaway, J. H.	Moore, E. S.	Walker, M. B.
Carey, H. W.	Hitzrot, J. M.	Parker, H. P.	Warfield, L. M.
Chowning, W. M.	Holden, G. R.	Pullen, E. K.	Warren, G. W.
Comer, R. T.	Hume, E. H.	Rubel, M. J.	Watts, S. H.
Comstock, E.	Johnston, W. B.	Rushmore, S.	Wells, E. A.
Connor, G. L.	Kauffman, B. B.	Russ, R. J.	Wells, M.
Connor, R.	Kaufman, H. M.	Salter, J. C.	Winne, C. K., Jr.
Drake, G. S., Jr.	Kimball, A. H.	Simis, M. P.	

PHYSICIANS ATTENDING SPECIAL COURSES. (9).

Behle, A. C.	Currie, W. L.	Latimer, C. W.	Nesbitt, B.
Carpenter, F. A.	Fearn, T.	McCalla, L. P.	Wyeth, M. C.
Cone, C.			

During the months of May and June, 1897, the Special Courses for Graduates in Medicine were attended by 58 physicians. Their names are given in the first edition of the Annual Register, 1897-98, now ready.

THE JOHNS HOPKINS UNIVERSITY.**AUTUMN ENROLMENT.**

PHILOSOPHICAL DEPARTMENT:		Nov. 12, 1896.	Nov. 15, 1897.
Graduates, - - - - -		206	208
Undergraduates, - - - - -		144	153
Special, - - - - -		32	33
		<hr/>	<hr/>
		382	394
MEDICAL DEPARTMENT:			
Candidates for M. D.:			
Fourth year, - - - - -		17	26
Third year, - - - - -		29	34
Second year, - - - - -		36	44
First year, - - - - -		42	167
		<hr/>	<hr/>
Doctors of Medicine, - - -		8	9
		<hr/>	<hr/>
Total, - - - - -		514	570

The above enumeration does not include all the attendants on special courses of instruction given to Doctors of Medicine.

Vacancies in the HOPKINS SCHOLARSHIPS offered to graduate students from North Carolina and Virginia have been filled as follows:

Honorary:

W. HULLIHEN, of Virginia.

Ordinary:

H. CANTER, of Virginia.

W. C. COKER, of North Carolina.

The Ordinary Hopkins Scholarships offered to newly-entering matriculated students from Maryland have been awarded, after a competitive examination, as follows:

J. W. GRIFFIN.	E. P. HYDE.	F. P. ROUS.
J. H. EAGER, JR.	C. J. BEEUWKES.	C. E. BROOKS.

A course of twelve lectures by Professor W. K. BROOKS on the Principles of Science as illustrated by Zoology began November 29, and will continue till December 15.

A course of laboratory work in Botany will be offered during the winter term of the present year. Those interested may obtain further particulars from D. S. JOHNSON, Ph. D., Adam T. Bruce Fellow, Room 16, Biological Laboratory.

HOURS FOR LECTURES AND RECITATIONS, FIRST HALF-YEAR, 1897-98.

HOURS.	MONDAY.	TUESDAY.	WEDNESDAY.	THURSDAY.	FRIDAY.	SATURDAY.
A. M.	Theory of Functions: Adv. (Craig.) Organic Chemistry. (Remsen.)	Theory of Functions: Adv. (Craig.) Organic Chemistry. (Remsen.) Gen. Chem.: Minor. (Randall and Gilpin.)	Gen. Chem.: Minor. (Remsen.) Physical Chemistry. (Randall.)	Theory of Functions: Adv. (Craig.) Gen. Chem.: Minor. (Remsen.) Physical Chemistry. (Randall.)	Math. Conference. (Craig.) Gen. Chem.: Minor. (Remsen.) Analytical Chemistry. (Morse.)	Chemistry: Journal Meeting. (9-10.30.) Physical Seminary. (Ames.) Experimental Physics. (Mather.) (9-12.)
9	Solid Geometry: Elem. (Cohen.) Italian: Elective. (Baxter.) Electricity. (Duncan.) Spanish: Elective. (Kuersteiner.) English Literature. (Greene.) German Readings. (Baker.) Economic Sociology. (Sherwood.) Latin Pro-Seminary. (Smith.) French Syntax. (R. H. Wilson.) Descriptive Astronomy. (Poor.) Vocal Culture. (Lee.) French: Elective. (Armstrong.)	Chemistry: Major. (Renouf.) Latin Composition. (H. L. Wilson.) Italian: Minor. (Rambeau.) German Seminary. (Wood.) Determinants and Calculus. (Hulburt.) Electricity. (Duncan.) General History Exam. (Ballagh.) Historical Geology. (Clark.) French: Elem. (Kuersteiner.) Zoology: Major. (Brooks.) Differential Equa. (Cohen.) (8 a. m.) German: Elem. (Vos.) Spanish: Minor. (Marden.) Ricardo. (Hollander.) Roman Literature. (Smith.) French Syntax. (R. H. Wilson.) Spherical Astronomy. (Poor.) Greek Readings. (Miller.) Arabian Nights. (Johnston.)	Chemistry: Major. (Renouf.) Livy. (H. L. Wilson.) Italian: Minor. (Rambeau.) Schiller's Dramas. (Wood.) Determinants and Calculus. (Hulburt.) Electrical Seminary. (Duncan, Hering, Geer.) Historical Geology. (Clark.) Zoology: Major. (Brooks.) Theory of Invariants. (Cohen.) (8 a. m.) German: Elem. (Vos.) Spanish: Minor. (Marden.) Ricardo. (Hollander.)	Chemistry: Major. (Renouf.) Livy. (H. L. Wilson.) Italian: Minor. (Rambeau.) German Seminary. (Wood.) Determinants and Calculus. (Hulburt.) Electricity. (Duncan.) Petrography. (Mathews.) French: Elem. (Kuersteiner.) Zoology: Major. (Brooks.) Differential Equa. (Cohen.) (8 a. m.) Spanish: Minor. (Marden.) Modern Banking. (Sherwood.) Greek Readings. (Miller.) Hebrew Exercises. (Johnston.)	Chemistry: Major. (Renouf.) Livy. (H. L. Wilson.) Italian: Minor. (Rambeau.) German Seminary. (Wood.) Determinants and Calculus. (Hulburt.) Electricity. (Duncan.) Geology: Journal Club. French: Elem. (Kuersteiner.) Zoology: Major. (Brooks.) German: Elem. (Vos.) Spanish: Minor. (Marden.) Modern Banking. (Sherwood.)	
10	Greek Seminary. (Gildersleeve.) Heat Conduction, etc. (Rowland.) Physics: Minor. (Ames.) Osteology. (Andrews.) Electrical Measurements. (Hering.) Theory of Surfaces. (Craig.) Zoology: Adv. (Brooks.) Latin Composition. (Smith.) German: Major. (Vos.) French: Major. (Rambeau.) Ancient History. (Ballagh.) French Philology. (Armstrong.) Homer and Greek Comp. (Miller.) Old Spanish Readings. (Marden.) Economics. (Hollander.) Historical Politics. (Vincent.)	Practical Exercises. (Gildersleeve.) Heat Conduction, etc. (Rowland.) Descriptive Astronomy. (Poor.) Theory of Surfaces. (Craig.) Zoology: Adv. (Brooks.) Solid Geometry: Elem. (Cohen.) German Readings. (Baker.) English Literature. (Greene.) French Phonetics. (Armstrong.) Arabian Nights. (Johnston.) Vocal Culture. (Lee.) Historical Method. (Vincent.)	Greek Seminary. (Gildersleeve.) Physics: Minor. (Ames.) Osteology. (Andrews.) Spherical Astronomy. (Poor.) Zoology: Adv. (Brooks.) Juvenal. (Smith.) German: Major. (Vos.) French: Major. (Rambeau.) Ancient History. (Ballagh.) Gothic. (Wood.) Arabic: Elem. (Johnston.) Spanish Philology. (Marden.) Economics. (Hollander.) Historical Politics. (Vincent.) Cicero, etc. (H. L. Wilson.)	Plato. (Gildersleeve.) Heat Conduction, etc. (Rowland.) Physics: Minor. (Ames.) General Biology. (Andrews.) Theory of Surfaces. (Craig.) Zoology: Adv. (Brooks.) Juvenal. (Smith.) German: Major. (Wood & Baker.) French: Major. (Rambeau.) Ancient History. (Ballagh.) Hebrew Exercises. (Johnston.) Spanish Seminary. (Marden.) Economics. (Sherwood.) Historical Method. (Vincent.) Cicero, etc. (H. L. Wilson.)	Practical Exercises. (Gildersleeve.) Heat Conduction, etc. (Rowland.) Physics: Minor. (Ames.) General Biology. (Andrews.) Electrical Measurements. (Hering.) Zoology: Adv. (Brooks.) Juvenal. (Smith.) German: Major. (Vos.) French: Major. (Rambeau.) Ancient History. (Ballagh.) Gothic. (Wood.) Assyria and Babylonia. (Johnston.) Spanish Philology. (Marden.) Economics. (Sherwood.) Cicero, etc. (H. L. Wilson.)	
11	German: Minor. (Wood.) Civilization. (Adams.) Roman Comedy. (Warren.) Logic and Psychology. (Griffin.) German: Minor B. (Baker.) Theory of Functions: Elem. (Chessin.) Modern Dutch. (Vos.) French Dialects. (Elliott.) Strength of Materials. (Geer.) Mineralogy. (Mathews.) Public Law. (Willoughby.)	German: Minor. (Vos.) Civilization. (Adams.) Latin Seminary. (Warren.) Logic and Psychology. (Griffin.) German: Minor B. (Baker.) Theory of Functions: Elem. (Chessin.) Assyrian Texts. (Johnston.) Old Saxon. (Wood.) Romance Seminary. (Elliott.) Strength of Materials. (Geer.) Mineralogy. (Mathews.) Public Law. (Willoughby.)	English Drama. (Browne.) Roman Politics. (Adams.) Aulus Gellius. (Warren.) Logic and Psychology. (Griffin.) Forensics. (Lee.) Physics: Jour. Meet. (Rowland & Ames.) Assyrian: Elem. (Johnston.) Modern Dutch. (Vos.) Romance Club. (Elliott.) Steam Engineering. (Geer.) Solid Geometry: Elem. (Cohen.) Mineralogy. (Mathews.) English Literature. (Greene.)	German: Minor. (Vos.) Roman Politics. (Adams.) Latin Inscriptions. (Warren.) Logic and Psychology. (Griffin.) German: Minor B. (Baker.) Optical Theories. (Ames.) Steam Engineering. (Geer.) Theory of Invariants. (Cohen.) Mineralogy. (Mathews.) European History. (Vincent.)	German: Minor. (Vos.) Nineteenth Century. (Adams.) Latin Seminary. (Warren.) Logic and Psychology. (Griffin.) German: Minor B. (Baker.) Optical Theories. (Ames.) Syriac. (Johnston.) Old Saxon. (Wood.) French Philology. (Armstrong.) Zool. Jour. Club. (Brooks & Andrews.) Steam Engineering. (Geer.) Theory of Invariants. (Cohen.) Petrography. (Mathews.) European History. (Vincent.)	
M.	Physics: Major. (Ames.) Greek: Major. (Spieker.) French: Minor. (Rambeau.) Arglo-Saxon. (Bright.) English Constitution. (Lee.) Rhetoric. (Greene.) General Geology. (Clark & Shattuck.) Popular Latin. (Elliott.) French: Minor B. (Ogden.) Political Philosophy. (Willoughby.) Celestial Mechanics. (Chessin.) Sanskrit: Elem. (Bloomfield.)	Physics: Major. (Ames.) Greek: Major. (Spieker.) French: Minor. (Rambeau.) Shakespeare. (Bright.) English Constitution. (Lee.) Rhetoric. (Greene.) General Geology. (Clark & Shattuck.) Romance Seminary. (Elliott.) English: Major. (Browne.) French: Minor B. (Ogden.) German Novel. (Baker.) Political Philosophy. (Willoughby.) Celestial Mechanics. (Chessin.)	Physics: Major. (Ames.) Greek: Major. (Spieker.) French: Minor. (Rambeau.) Anglo-Saxon. (Bright.) American History. (Steiner.) Rhetoric. (Greene.) General Geology. (Clark & Shattuck.) Dante. (Elliott.) Physiology. (Howell.) French: Minor B. (Ogden.) Celestial Mechanics. (Chessin.) Sanskrit: Adv. (Bloomfield.)	Municipal Government. (Ballagh.) Demosthenes. (Spieker.) Italian: Elective. (Baxter.) English Versification. (Bright.) Economics. (Hollander.) English Literature. (Greene.) General Geology. (Clark & Shattuck.) Spanish: Elective. (Kuersteiner.) Physiology. (Howell.) Vocal Culture. (Lee.) French Criticism. (Ogden.) Scientific German. (Baker.) Solid Geometry: Elem. (Cohen.) Projective Geometry. (Chessin.) Physical Chemistry. (H. C. Jones.) Latin Jour. Club. (Warren.) (Alternate Thursdays.)	Physics: Major. (Ames.) Greek: Major. (Spieker.) French: Minor. (Rambeau.) American History. (Steiner.) Spanish Epic Poetry. (Marden.) Physiology. (Howell.) English: Major. (Browne.) French: Minor B. (Ogden.) German Novel. (Baker.) Hebrew at Sight. (Johnston.) Projective Geometry. (Chessin.) Physical Chemistry. (H. C. Jones.) Sanskrit: Elem. (Bloomfield.)	
P. M.	Analytic Geometry. (Hulburt.) English: Minor. (Browne.) Greek: Minor. (Spieker.) Middle High German. (Vos.) Mechanical Drawing. (Geer.) Arabic Composition. (Haupt.) Hebrew Composition. (Haupt.) (3.30.) Mechanical Drawing. (Geer.) Old French Readings. (Armstrong.) Compar. Philology. (Bloomfield.) Hebrew: Second Year. (Haupt.) Mechanical Drawing. (Geer.) Physiological Jour. Club. (Howell.) Hebrew: Adv. (Haupt.) Scientific German. (Hofmann.)	Analytic Geometry. (Hulburt.) English: Minor. (Browne.) Greek: Minor. (Spieker.) Middle High German. (Vos.) Mechanical Drawing. (Geer.) Drawing. (Whiteman.) Zoology: Elective. (Brooks.) Compar. Hebrew Grammar. (Haupt.) English Seminary. (Bright.) Drawing. (Whiteman.) Mechanical Drawing. (Geer.) Zoology: Elective. (Brooks.) Lithuanian. (Bloomfield.) Daniel and Ezra. (Haupt.) English Seminary. (Bright.) Mechanical Drawing. (Geer.) Drawing. (Whiteman.) Zoology: Elective. (Brooks.) Physiological Seminary. (Howell.) Sumerian. (Haupt.) German Conversation. (Hofmann.)	Analytic Geometry. (Hulburt.) English: Minor. (Browne.) Greek: Minor. (Spieker.) Hebrew: Elem. (Haupt.) Old French Readings. (Armstrong.) Hebrew: Elem. (Haupt.) English Versification. (Bright.) Biblical Criticism. (Haupt.)	Analytic Geometry. (Hulburt.) English: Minor. (Browne.) Greek: Minor. (Spieker.) Homer and Greek Comp. (Miller.) Drawing. (Whiteman.) English Seminary. (Bright.) Drawing. (Whiteman.) The Avesta. (Ness.) Comparative Grammar. (Bloomfield.) English Seminary. (Bright.) Economic Seminary. (Sherwood.) Drawing. (Whiteman.) Economic Seminary. (Sherwood.) Scientific German. (Hofmann.)	Analytic Geometry. (Hulburt.) English: Minor. (Browne.) Greek: Minor. (Spieker.) Homer and Greek Comp. (Miller.) Scientific German. (Baker.) French: Elective. (Armstrong.) Vocal Culture. (Lee.) English Literature. (Greene.) Economics. (Hollander.) Demosthenes. (Spieker.) Homer and Greek Comp. (Miller.) Scientific German. (Baker.) French: Elective. (Armstrong.) Vocal Culture. (Lee.) History of Philosophy. (Griffin.) Vedic Seminary. (Bloomfield.) Political Conference. (Willoughby.) (Alternate Fridays.) Historical Seminary. (Adams.) (8 p. m., alternate Fridays.) Germanic Society. (Wood.) (8 p. m., alternate Fridays.) English Journal Club. (Bright.) (8 p. m., alternate Fridays.)	Historical Conference. (Vincent.) (8 p. m., alternate Saturdays.)

LECTURES OPEN TO THE PUBLIC DURING THE SESSION OF 1897-98.

[The Trustees of the Johns Hopkins University, in a desire to extend as far as they can the influence of the foundation, have decided to open to the public, during the current year, as heretofore, certain courses of lectures. It must be remembered that these are academic lectures, primarily intended for the instruction of students, and that they are supplementary to courses which are here in progress. Seats are therefore reserved for members of the University, who are usually so occupied that they cannot take their places until the last moment. Other hearers, understanding this regulation, are required to respect it by leaving the reserved seats free until the lecture hour. In most cases, cards of admission will not be needed. If there is likely to be a crowded room, tickets of admission will be issued, and these must be obtained in advance and shown at the door. Further particulars will be made known from time to time.]

I.

In connection with the classes in the history of Eastern Asia, lectures have been given on certain aspects of Modern Japan.

David Murray, Ph. D., LL. D., of New Brunswick, N. J., late Adviser to the Japanese Minister of Education, gave two lectures on Education in Japan, November 15 and 16.

Professor K. Mitsukuri, Ph. D., one of the Japanese Delegates to the recent Washington Conference on the Seal Fisheries, a graduate and formerly a Fellow of this University, gave two lectures on the University of Tokyo and on Recent Changes in Japan, November 17 and 18.

Mr. Rokuro Nakaseko, a graduate student of the University, gave an illustrated lecture on Contemporary Japan, November 19.

II.

The seventh course of Turnbull memorial lectures upon Poetry will be delivered in the latter part of March by Professor Charles R. Lanman, Ph. D., once a Fellow and an Associate of this University, and now Professor of Sanskrit in Harvard University. He has been for several years Secretary of the American Oriental Society, and is one of the most distinguished students of Sanskrit literature in this or any country.

The subject will be "The Poetry of India," and it will be treated in eight lectures, from March 21 to April 1.

III.

Provision is made from the income of the Donovan foundation, for several courses on English literature.

1. Mr. Richard Burton, of Hartford, Conn., a Doctor of Philosophy of this University, well known as a writer of poetry and prose, will deliver a course of six lectures on "The Modern Novel," from January 3 to 13.

2. Professor William Knight, LL. D., of the University of St. Andrews, the biographer of Wordsworth, and editor of the latest and most complete edition of the writings of that poet, will deliver three lectures on Wordsworth and his contemporaries, Coleridge, Shelley and Keats. This course will be given March 9, 10, 11.

3. Rev. Henry Van Dyke, D. D., LL. D., of New York, the well-known preacher and poet, will give three lectures March 15, 17, 18. His subject will be "Three Nineteenth Century Poets and Prophets,—Wordsworth, Browning, and Tennyson."

4. Professor Woodrow Wilson, of Princeton University, an alumnus and for many years a lecturer in this institution, has been invited to deliver several biographical lectures on certain recognized leaders of political science.

IV.

Rev. Professor T. K. Cheyne, D. D., of Oxford University, Oriel Professor of the Interpretation of Holy Scripture, and Canon of Rochester, will deliver six lectures on "Phases of Jewish Religious Life after the Exile," from January 4 to January 21.

This course has been arranged through the American Committee for Lectures on the History of Religions, organized in 1892 for the purpose of encouraging the intelligent study of religions. Professor Cheyne is one of the leading Biblical scholars of the day. Among his works are Studies of the Psalms; the Prophecies of Isaiah, Jeremiah, etc.

PROCEEDINGS OF SOCIETIES.

Scientific Association.

October 21, 1897.—Annual business meeting. Officers for the ensuing year were elected as follows:

President, Professor IRA REMSEN; *Vice-President*, Professor WILLIAM H. HOWELL; *Secretary*, Dr. CHARLES L. POOR.

November 23.—One hundred and thirty-fourth regular meeting. The following communication was presented:

The Yerkes Observatory and the Exercises held in connection with its Dedication, by CHARLES L. POOR.

Philological Association.

October 15, 1897.—One hundred and sixtieth regular meeting. Professor Gildersleeve in the chair. Forty-eight members were present.

Papers read:

Some Gleanings from Terence Manuscripts, by M. WARREN.

The Participle in Hesiod, by G. M. BOLLING.

November 19.—One hundred and sixty-first regular meeting. Professor Gildersleeve in the chair. Thirty-one members were present.

Papers read:

The Sources of Davenant's "Albion" and "Siege of Rhodes," by K. CAMPBELL.

The Arrangement of the Fables of Marie de France, by M. P. BRUSH.

Historical and Political Science Association.

October 8, 1897.

Local Observations in England and Scotland, by F. R. JONES.

Summer Studies in France and Switzerland, by J. M. VINCENT.

A Vacation in Berlin, by SIDNEY SHERWOOD.

Materials for Southern History in State Libraries, by J. C. BALLAGH.

October 22.

An Oxford Summer Meeting, by F. R. JONES.

The Last Work of Herbert Tuttle, by L. F. SCHMECKEBIER.

The House of Arundel, by ST. G. L. SIOUSSAT.

Greater New York and its Street Railways, by T. S. ADAMS.

The Scholar and the State, by J. R. EWING.

November 5.

Memorial Sketch of Justin Winsor, by H. B. ADAMS.

An Edinburgh Summer Meeting, by H. B. ADAMS.

The Gold Fields of Alaska, by C. W. SOMMERVILLE.

The Andrews Case at Brown University, by C. H. BROUGH.

Lecky's "Democracy and Liberty," by G. L. P. RADCLIFFE.

Schouler's "Constitutional Studies," by C. SNAVELY.

November 19.

The Monetary Situation, by J. H. HOLLANDER.

Social England, by ST. G. L. SIOUSSAT.

Commercial Education in Europe, by D. E. MOTLEY.

Socialism and Statistics, by W. S. MYERS.

The Historical Archives of Lombardy, by R. GARRETT.

Some Great Trusts, by W. T. THOM.

Bibliography of Education, by W. S. DREWRY.

Naturalists' Field Club.

October 12, 1897.—Election of Officers:—

President, B. W. BARTON; *Vice-President*, G. A. DREW; *Secretary*, C. E. WATERS;

Chairman Zoological Section, GEO. LEFEVRE; *Chairman Botanical Section*, D. S.

JOHNSON; *Chairman Geological Section*, A. G. LEONARD.

Papers and Reports:

Abundance of Fern Spores, by C. E. WATERS.

Sterculia platanifolia, by J. H. BRUMMELL.

Blue-green Algae, etc., by D. S. JOHNSON.

November 9.

Collecting in Jamaica, by E. W. BERGER.

Abnormal Oaks, by J. H. BRUMMELL.

Young Men's Christian Association.

September 25.—Opening of Levering Hall.

October 4.—Reception to New Students.

October 19.—University Settlement Meeting.

November 2.—Mr. A. L. Seth elected Member of Executive Council.

November 15-19.—Week of Prayer for Young Men. Short daily services, conducted by members of the Faculty.

November 23.—Anniversary Address, by the Rev. OLIVER HUCKEL.

PUBLIC MEETINGS AND SOCIAL ASSEMBLIES

Recently held in the University Buildings:

A meeting in memory of Professor Humphrey and Dr. Conant, in the Donovan Room, October 3.

A reception by the Young Men's Christian Association of the University to the students who have recently entered, in Levering Hall, October 4.

A reception by the Graduate Students' Association, in Levering Hall, October 8.

The annual meeting of the Maryland Homeopathic Medical Society, in Levering Hall, October 19.

A meeting under the auspices of the Poor Association of Baltimore in furtherance of the project for establishing sewing schools, in Levering Hall, October 27.

A session of the Maryland Public Health Association, in Levering Hall, November 19.

First annual meeting of the Maryland Conference of Charities and Correction, in McCoy Hall and Levering Hall, November 22 and 23.

SCIENTIFIC NOTES.

The Epic and Attic Use of the Circumstantial Participle. By G. M. BOLLING.

[Abstract of a paper read before the University Philological Association, October 19, 1897.]

The origin of the class of words that we call participles must be sought for in the adjective.—Paul, *Principien der Sprachgeschichte*, p. 308; Brugmann, *Grund.* II, 428; Gr. Gram., 196; Delbrück, *Vgl. Syntax*, I, 477. A class of adjectival formations that have the appearance of being formed from the present or aorist stem as well as from the verbal root, could set the pattern for other analogical formations from the different tense stems, and in this way we should obtain a class of adjectival words in which the idea of time, which is only implied in the adjective proper, would be explicitly expressed, so that these words would come to designate an attribute that is temporally limited from the point of view of the speaker, and in this way would approximate to the nature of the verb. In other words the participle is an adjective with a richer content of meaning since it brings from its association with the verb the distinction of voice and tense and the power of verbal regimen. The adjective represents a quality at rest, the participle represents a quality in motion, and the difference between the two is a difference in the degree of mobility.—Cf. Schroeder, *Über die formelle Unterscheidung der Redetheile*, p. 86.

The special value of this formation is, as Paul points out, that it allows us to use the expression of an event in the form of an attribute. In this way it becomes an easy means for giving the subordinate details, the attendant circumstances of an action, without bestowing upon them a prominence that would distort the perspective; or, to phrase it differently, the participle serves to color while the finite verb gives the outlines of the action.—Cf. Dr. Gildersleeve, *Pindar*, cix; A. J. P., IX, 137 ff. This is the original function of the participle and the development of it in Greek is justly recognized by Jolly—see A. J. P., IX, 139 n.—as one of the chief factors that go to make up the superiority of the Greek language.

The work—*The Participle in Hesiod*¹—of which this paper is a summary, was based on complete collections of the participle in Hesiod and in the *Iliad*. Its purpose was to see whether it could not be shown that the Greek development of the participle was essentially post-Homeric. Such a view of the development of the Greek participle is in opposition to the opinion expressed by Classen in his *Beobachtungen über den homerischen Sprachgebrauch*; cf. especially, p. 44, where he maintains that the Homeric use of the participle is in no respect inferior to that of the most highly developed Attic Prose. Classen's views have been criticised in detail by Dr. Spieker, A. J. P., VI, 310 ff. The chief reason for his lack of appreciation of the nature of the participle is his tendency towards "resolving" the participle into a finite subordinate clause, a tendency which was due no doubt to the poverty of the German language in participial constructions that Classen himself laments, and from which Vogrinz seems to have best succeeded in freeing himself. Cf. p. 278, when he waives all "resolutions" of the participle as purely logical operations; p. 248, when he speaks of the concessive sense of the participle as existing for our feeling for the language.

The original function of the participle was to express the subordinate details, the attendant circumstances of an action. The circumstances may stand in different logical relations to the main action of the sentence, but none of these relations ever receives formal expression in the participle except the relation of time. Originally, even this was no exception, for the tense of the participle expressed at first merely the "kind of time" of the subordinate action and not its temporal relation to the main action, since the notion of priority was not inherent in the aorist and was not completely attached to it until after the Epic period, as is shown by the use of the aorist participle in Epic poetry to express actions contemporary with the tense of the leading verb. Cf. Seymour, *On the Use of the Aorist Participle in Greek*; *Trans. Am. Phil. Ass.*, 1881, pp. 88–96; Delbrück, *Vgl. Syntax*, 2, 482. Nevertheless under the pressure of the needs of translation into languages that are inferior to the Greek in their participial construction, grammarians have become accustomed to take these *logical* relations as the

basis of their classification of the participle. Vogrinz is undoubtedly right in breaking from this tradition, only he might have gone farther and declared such resolutions to be injurious as tending to deaden the feeling for the difference between the participle and the finite subordinate clause.

Paul—p. 158 of the translation—lays down the principle that we cannot "maintain that the participial construction in itself admits of different meanings—i. e., that it denotes now the reason, now the condition, now an opposition, etc. These relations remain in each case only 'occasional' and 'accidental.'" However, the participle is freely used in English, and still more freely in Attic Greek where the speaker *intends* that the hearer shall infer one of these logical relations, and we may then speak of the "use of the participle for abridging the sentence, that is, for representing temporal, causal and relative clauses" (Dr. Gildersleeve, A. J. P., IX, 138 n), of the participle as a conscious shorthand substitute for a subordinate clause.

As the intentional use of the participle in this way becomes more conscious, there will be a growing tendency to make the desired inference more unmistakable by the addition of particles to designate the relation between the main and subordinate actions. We should then recognize that the participle is a second stage of development behind which there is the possibility of a third. For the "occasional" use may pass into a part of the "usual" signification of the form, the particles may be felt to be unnecessary, and the participle may then be employed to *express of itself* the logical relation between main and subordinate action, though it is evident, of course, that if several of the participial constructions passed into this stage of development, there would result a state of confusion that could not long maintain itself in any language.

It is in the development along these lines of the participle as a substitute for a subordinate finite clause that the greatest and most essential difference between the Epic and the Attic use of the participle exists. Seymour calls attention to the fact that Homer frequently employs the finite verb where Attic prose would use the participle, *e. g.*

A 458: αὐτὰρ ἐπεὶ ῥ' ἐξάντο καὶ οὐλοχύτας προβάλλοντο

instead of εὐξάμενοι καὶ προβαλόμενοι; and conversely we may say that while a sentence like "if you do not think of flight you will save the people" may be rendered into Attic by the participle, in Epic it can be expressed *only* by a finite subordinate clause. The extent of this difference is shown by the following figures: in Euripides—see Lodge, *Participle in Euripides*—the circumstantial participles, the participles that are not used as abridgments of temporal, causal, or conditional clauses, amount to only one-fifth of the total number of participles. In Hesiod—in spite of the fact that he is exceedingly fond of the adjectival use of the participle—they constitute considerably more than half the total. This shows that the reason why Epic poetry can employ the subordinate finite clause where Attic prose uses the participle and yet not become araiometochic, is because of the freer use of the pure circumstantial participle, and in this is to be found one of the main causes for the swiftness and vividness of Epic narrative. Even after making liberal allowances—which are necessary on account of the subjective nature of the work—for differences in drawing the line between circumstantial participles and those that are substitutes for subordinate clauses, the fact remains that we have here a difference in the syntax of the two periods which is fundamental and characteristic.

The difference that is indicated in this way is borne out by a detailed study of the different constructions. The adversative participle is the one that established itself most firmly in Greek, and that it must have done so at an early period is shown by the fact that it has become the chief mode of expression for the adversative relation. Accordingly, it is not surprising to find it in the Homeric poems in the second stage of its development, freely used with particles to make the meaning unmistakable. Later, these warning particles are felt to be unnecessary, and then it may be fairly claimed that the adversative relation is felt to be a part of the usual signification of the participle. The following table will show the difference between the Epic and Attic usage:

	Il.	Od.	Hes.	Eur.	Xen. An.
With particles,	150	104	15	36	14.
Without particles,	32	39	1	414	63.

¹ Reprinted from *The Catholic University Bulletin*, Vol. III, pp. 421–471, Washington, 1897.

In this connection it may be well to call attention to the range of *καίπερ* in the Orators: Antiphon, Andocides, Lysias, Hyperides and Deinarchos do not use it at all (2.6; 6.11, belong to Pseudo-Lysias). Isaeus 6.54 and Lycurgos 75 have but one example; Aeschines has two 1.45, 167. Isocrates uses it in his letters 2.14; 4.1, 8; 9.16, and in passages of a similar character in his speeches 9.11; 11.9; 12.1; 15.11, 272, 320. Demosthenes is freer in his usage.¹

Of the remaining constructions, the finite temporal clause is the one which the participle could replace with the greatest ease, because it contains in its tense an explicit designation of time. For this reason also it is especially hard to determine when the participle is merely circumstantial and when the author employs it with the intention that his audience shall infer the temporal relation between the two actions. There are in Hesiod about fifty examples in which the participle seems to be used to date as it were the time of one action with reference to another, and the construction seems to be in about the same state in the Iliad. There is, however, one test which is not subjective and which shows clearly the difference between Attic and Epic—the use of particles to make the inference unmistakable. Kühner, Krüger and Goodwin declare that this is frequent in Attic, while in Epic we have only a few examples, generally from the Odyssey and the latest parts of the Iliad.

The causal and conditional uses of the participle are even rarer, and it is to be noted that there is not a single case in which a participle is employed to render the inference of such a relation unavoidable. The use of the future participle to express purpose is, as well known, confined to verbs of motion—the construction with *ὥς* that afterwards becomes a form of oratio obliqua is unexampled. But it is interesting in connection with Hopkins' view (The Aryan Future, A. J. P., XIII, 1 ff.) that the future originally designated intention and not merely future time, to observe that the desiderative participles are subject to exactly the same limitations.

For the limitations of the gen. abs. I will refer to Dr. Spieker's article, A. J. P., VI, 310 ff., and merely call attention to the fact that the greater frequency of the construction in Hesiod contains an interesting confirmation of his theory of the temporal origin of the construction. Dr. Spieker observes, p. 342, "A number of the examples in Homer involve expressions of time as *ἔτεος* and *ἐνιαυτοῦ*." Now the increase of the construction in Hesiod is due to the large number of similar expressions that were demanded by the nature of his work *ἡοῦς γεινομένης*, *ἔαρος νέον ἱσταμένοιο*, *μηρῶν φθινόντων*, *ἐς τέλος ἐλθόντος θέρους*, *ἐπιπλομένων ἐνιαυτῶν*, etc.

But the most interesting proof of the undeveloped state of the participle as a substitute for a subordinate clause is to be found in the use of the participle with the negative. Originally the negatives *οὐ* and *μή* were employed only with finite verbs, participles and infinitives being negated by composition with the negative prefix. Relics of this stage are to be seen in *ἀέκων ἀεκαζόμενος ἀφρονέοντες* and in the use of *οὐ φημι*. Monro considers the first exception to this rule in Greek to have been the use of *οὐ* with the participle, a usage which he declares is well established in Homer.

The use of *οὐ* and *μή* with the participle can have arisen in two ways: first, by displacement of the syntactical distribution; and second, owing to the feeling that the participle was an equivalent for a subordinate clause. The examples in Epic poetry, which are not so frequent as Monro's statement would lead one to expect, show plainly that they are due to displacement of the syntactical distribution, and in most cases the manner of the change is still visible. Thus in a sentence like "he did not slay him playing the coward but [he slew him] standing in front of the Trojans," the negative which originally belongs to the verb tends owing to the contrast to be felt as belonging to the participle—"he slew him not playing the coward but standing in front of the Trojans."

Ω 214. ἐπεὶ οὐ ἐ κακίζόμενον γε κατέκτα
ἀλλὰ πρὸ Τρώων ἐστῆατα.

In this case, of course, the negative will be the negative that was used with the leading verb. This is of importance in determining the question whether the character of the leading verb can affect the choice of the negative of the participle, and as this is the first way in which the negatives *οὐ* and *μή* come to be attached to the participle, the question must, I think, be answered in the affirmative.

The absence of the negative *μή* with the conditional participle is evidently due to the fact that the use of the participle as a substitute for a conditional clause had not yet developed, and it is for a similar reason that other combinations of the negative with the participle (except with the adv. part. and where coming from displacement of the syntactical distribution) are extremely rare. Delbrück, Vgl. Syntax, 2, 531, argues rightly that the participle gives up its combination with the negative prefix as it approaches the nature of the finite verb. But the argument may be carried farther: in Attic prose the participle is found freely combined with the negatives that originally belonged to the finite verb, in Epic poetry we see only the beginnings of such a usage, and I think that we are justified in seeing in this difference clear proof of a still farther advance of the participle towards the finite verb, or in other words of the development of the participle as a shorthand substitute for a subordinate finite clause.

The Maryland and Virginia Boundary Controversy. By LOUIS N. WHEALTON.

In some sixty pages, the author has told the story of the long controversy between Maryland and Virginia over their common boundary. This is the first complete account of the controversy which has yet been attempted, and together with the monograph, "The Early Relations between Maryland and Virginia," by J. H. Latané, Ph. D., forms a full history of interstate relations.

This dispute arose about the year 1660 and continued until 1894, having the following points at issue:

1. The western end of the line which was to divide Maryland and Virginia was described, in the charter to Lord Baltimore in 1632, as "the First Fountain of the Potomack." The Potomac river has two branches called the North and South branch respectively. Maryland claimed that the South branch was the "First Fountain" and that the land between these two branches was hers. Virginia disputed this claim and pronounced the North branch to be the first source. The land between the two branches was, at last, yielded to Virginia. Maryland decided to accept the North branch as the true source, in the hope that an extension westward would offset the loss of the land between the two branches. In this Maryland was disappointed, for Virginia insisted that Maryland should not only accept the North branch as the true source, but must also begin her western boundary at the Fairfax stone. This stone was planted several miles from the headwaters of the North branch, and when Maryland, in 1852, agreed to this site as the beginning of her western boundary, all hopes of westward expansion were abandoned. The Civil War came on, and West Virginia fell heir to this boundary difficulty with Maryland. The line between Maryland and West Virginia has not yet been located.

2. Maryland claimed also the entire Potomac river under her charter. Virginia disputed the claim on similar ground. A Board of Arbitrators marked out the boundary, in 1877, and gave the river to Maryland, so that Maryland's southern boundary to-day is to the southern bank of the Potomac. A notable event, in the history of this portion of the boundary, was the "Compact of 1785." The Articles of Confederation had made no provision for federal control of commerce or the regulation of interstate traffic. Maryland and Virginia agreed to certain commercial regulations known as the "Compact of 1785," and this action brought out clearly one of the chief weaknesses of the Articles of Confederation, and was the precursor of those conventions which led to the formation of our present Federal Constitution.

3. The place where the boundary between the two colonies should strike the eastern side of the Chesapeake Bay, was called "Watkins' Point," by the charter of 1632. The location of this point was in dispute from 1660 to the final settlement in 1894. Virginia claimed that the point was farther north than it is at present, while Maryland held it to be about where it is now. When the arbitrators located Watkins' Point on the map they conceded Maryland's claim.

4. Maryland and Virginia had entered into the agreement known as the "Compact of 1785," for the protection of shipping and punishment of crimes upon the waters which formed their common boundary. About a century afterwards, Virginia excluded Maryland from taking oysters in Pocomoke Sound. Maryland claimed a right to these oysters, in common

¹ Dr. Bloomfield and Dr. Gildersleeve call attention to the fact that both in Sanskrit and in Greek the adversative signification is the predominant one in the rarer absolute construction—in the genitive absolute in Sanskrit and in the accusative absolute in Greek.

with Virginia, under the terms of the "Compact." These oyster beds had become very valuable, and were estimated at this time to be worth twenty millions of dollars. The Supreme Court of the United States was appealed to and asked to construe the agreement of 1785 upon the point in question. This the Court did in 1894, and the decision was that the "Compact of 1785" gave Maryland no right to take oysters in Pocomoke Sound. The Board of Arbitrators, which had been agreed upon by the two States and which had settled the disputes as to the Potomac and Watkins' Point, had failed, in their award of 1877, to define accurately the term "head land." Upon the meaning of this word grew up a large part of the dispute which was settled by an appeal to the "Compact of 1785" and the decision of 1894.

The sources for the above were chiefly the various boundary reports and acts of legislatures in each State. Manuscript material, comprising the McDonald and De Jarnette Papers at Richmond, was also consulted upon the main points in the early part of the dispute.

Maps accompany the monograph, so that the various changes in the line and conflicting claims are made plain.

Early Development of the Chesapeake and Ohio Canal Project. By GEORGE W. WARD.

About 1748, the Ohio Company was chartered by Virginia for the purpose of taking possession of a large tract of land in the valley of the Ohio upon which had already been turned the covetous glances of the French from Canada. The Ohio Company at once established a trading post on the site now occupied by the city of Cumberland, whence an Indian trail led westward to the Ohio.

In 1775, Braddock's route to Fort Duquesne was selected upon economic rather than upon military grounds, hence the disastrous failure of the expedition. Governor Dinwiddie, of Virginia, and others interested in the Ohio Company were influential enough to procure the ordering of the Potomac route in order that their lands on the Ohio might be opened up by the road which Braddock would be compelled to make. In this way, as early as the beginning of the Seven Years' War, the Potomac route had become a factor in international politics.

A system of internal improvement to be undertaken by the Federal Government was favored by every president of the United States from Washington to John Quincy Adams. Some of them, however, especially Jefferson and Madison, believed an amendment to the constitution necessary to confer upon Congress the right to undertake such a system. But such an amendment, though several times proposed, was never received with favor, and in 1817 Congress passed an act for the inauguration of a system of internal improvement by the Federal Government without an amendment. The bill was promptly vetoed by President Madison, and for several years afterward little was done by the Federal Government in the matter of internal improvement. The National Road was the standing argument against the necessity of an amendment, while the friends of internal improvement urged the right of Congress to provide for the national defense and to regulate commerce as conferring the necessary power upon the Federal Government.

Meanwhile, there had sprung out of the failure of the Potomac Company an independent movement for a navigable canal from tidewater in the Potomac to the Ohio, and ultimately to the Great Lakes. To mature the necessary plans a convention, since known as the Chesapeake and Ohio Canal Convention, assembled in the hall of the Supreme Court in the Capitol at Washington in November, 1823. In this way the attention of the Federal Government was again called directly to the subject of internal improvement, and, upon the recommendation of the President, Congress passed an act, 1824, authorizing the creation of a United States Board of Internal Improvement. The surveys for the proposed Chesapeake and Ohio Canal were at once begun by the Board.

As a further result of the Convention of 1823, the concurrence of Virginia, Maryland, Pennsylvania and Congress in a charter was secured, and in June, 1828, the Chesapeake and Ohio Canal Company was formally organized, Mr. Charles Fenton Mercer, of Virginia, being chosen president. Within a few weeks the Potomac Company transferred all its rights, privileges, and franchises, by a deed of surrender, to the new com-

pany, and, on July 4, 1828, in the presence of the members of the cabinet, those members of the diplomatic corps, who happened to be in Washington, and a great crowd of interested spectators, ground was broken for the canal by John Quincy Adams, President of the United States, who said, "I consider this the most fortunate event of my life."

On the same day, and perhaps about the same hour, ground was broken in Baltimore by the venerable Charles Carroll of Carrollton for the Baltimore and Ohio Railroad. A legal controversy between the rival enterprises, begun two or three months later because the railroad was locating its line above Point of Rocks on the ground previously occupied by the canal, prevented either work from proceeding further than Point of Rocks until the final settlement of the controversy in favor of the canal in 1832. By that time the Canal Company, which had been subjected to ruinous delay and heavy losses, had become bankrupt; public opinion had decided in favor of the railroad; Congress refused any further assistance to the Canal Company, and the project, like its predecessor, failed. The revival of the enterprise under the patronage of Maryland and in greatly modified form marks the beginning of a distinct history.

The Labadist Colony in Maryland. By B. B. JAMES.

The Labadists were the earliest religious communal sect to be established in America. Bohemia Manor, in what is now Cecil County, Maryland, was the place of their settlement. Here they sought to develop the principles of their religion, which provided for a community of possessions, a system of vigorous self-denial and self-abasement, and the allotment of labor for the general weal, by the bishop as superintendent of the colony. In economic and disciplinary matters the power of the bishop was absolute and was often arbitrarily exercised. In matters distinctively spiritual he was assisted in his deliberations by a council of persons with semi-clerical functions, called "Speaking brothers and sisters." To these latter, in connection with a class of Bible readers, was committed the care of the children of the community.

Though not distinctively a millennial sect, Labadists cherished adventist hopes, which had an important influence in shaping their doctrines. Unworldliness was the key-note. This led to the belief that they constituted the elect church in which alone was to be found salvation. In consequence of this belief it was made imperative that the novice, before being received into full fellowship, should leave husband or wife, as the case might be, if not of the Labadist persuasion.

As Labadism was essentially a mystical form of faith, supreme reliance on the immediate communication of the Holy Spirit was a cardinal doctrine. Though the Bible was publicly read and expounded, yet it was believed that the Spirit was not dependent upon any medium of communication, and that without the aid of the Bible or any other intermediary agency, the soul of the believer could not fail to be immediately instructed in all sound doctrine. It was their accentuation of this tenet that led William Penn and his companions, Barclay and Keith, to make to the Labadists overtures of union with the Society of Friends. The mystical spirit of their faith led to peculiarities of teaching with regard to the Lord's Supper and the ordinance of baptism.

The theology of the Labadists belongs to the Calvinistic school, though divergent in many particulars. It was founded on an abstruse system of particular and general covenants. The Labadist system received its contributions from three sources: (1) the personality of its founder, who contributed the mystical element; (2) rigid discipline and asceticism, which were derived from the Society of Jesus, and (3) theology, largely drawn from that of the reformed churches.

The founder of Labadism was Jean de Labadie, a French mystic, born at Bordeaux in 1610. He received his education at a Jesuit college and united himself with that order. He successively became a Jansenist, a Carmelite and a Protestant minister. He acquired celebrity as a preacher of great eloquence in his Protestant connection, and his name became famous in all the Protestant countries of Europe as that of a remarkable preacher and profound theologian. He attracted the attention of the theologians of Utrecht, and for a time it seemed that he would be the last expression of the evangelical party in the Reformed Church of the Netherlands. Voetius and Lodenstine, the eminent theologians of the

University of Utrecht, who stood for the Voetian as opposed to the Cocceian theology of the church—representing respectively the Aristotelian and Cartesian schools of Philosophy—hoped that in Labadie would be found the practical reformer who should apply their tenets to the renovating of the church.

Having become seriously involved with the Reformed Church, Labadie ultimately became the founder of an independent church which he styled the Evangelical. It was this church which, after great vicissitudes, became established at Harwood, Friesland, where its peculiar system was more perfectly wrought out, and whence were sent those colonists who settled on the soil of Maryland in 1683.

Bohemia Manor, the place of the settlement, was the estate of Augustine Herman, a Bohemian adventurer, who had received from Lord Baltimore extensive tracts of land in what is now Cecil County, Maryland, and New Castle County, Delaware, in consideration of drawing for Lord Baltimore a map of Maryland and Virginia to assist him in the settlement of the boundary disputes between the two colonies.

The Labadist colony never numbered much more than a hundred persons, and in half a century from its founding it had become extinct. Its rigid discipline, its asceticism and its seclusion prevented it from attaining any extensive growth or exercising any commanding influence, while economic advantage gradually came to supplant religious motive. Yet a number of families of distinction in Maryland affairs derived their origin from the colony. Of these may be mentioned the Bayards and Bouchelles.

On the Study of Natural History in Japan. By K. MITSUKURI (Ph. D., Johns Hopkins), Professor of Zoology in the University of Tokyo and President of the Tokyo Zoological Society.

(Reprinted from Introduction to *Annotationes Zoologicae Japonenses*, Vol. I, 1897.)

"It is probably unknown to most persons in the West that early in the eighth century of the Christian era there was already established in Japan an Imperial University with four departments,—Ethics, History, Jurisprudence, and Mathematics—and with the prescribed number of four hundred students. There were also at the same time a bureau devoted to Astronomy, Astrology, Calendar-Compilation and Meteorology, and a Medical College with professors of Medicine, Surgery, Acupuncture, Necromancy (the art of healing by charms), and Pharmacology. The last-named branch of study included the collection, cultivation, and investigation of medicinal plants, and thus a considerable amount of botanical knowledge must already have been acquired by that time. Toward the end of the ninth century, when a catalogue of books existing in Japan was compiled by the order of the then reigning Emperor, the Imperial library was found to contain 16,790 volumes, divided into forty departments,—and this in spite of a disastrous fire of some years previous. Among the medical works were some with very modern-sounding titles, such as "The Curing of Diseases of Women," and "On the Methods of Healing Diseases of the Horse." Japan in those early days derived its culture from India, China, and Corea, but the details above enumerated clearly show that educated society must already have attained a high degree of civilization.

"Coming to more modern times, it is known that during the long peace of two hundred and fifty years which the rule of the Tokugawa *shoguns* secured for Japan, literature, the arts, and all peaceful industries were developed with remarkable vigor and rapidity, and that the study of Natural History shared in this progress. Apart from that innate love of Nature and the natural which was ever showing itself in poetry and other arts, the study of natural products was always pursued, ostensibly with the purpose of collecting *materia medica*, or of discovering things that might be used as food in case of a famine, or of identifying objects mentioned in the Confucian classic, "Shi-King." But it is not difficult to perceive that naturalists looked in reality beyond these simple or utilitarian ends, and investigated animals and plants for their own sake, although the principal aim of their researches seems to have been the comparatively barren one of establishing a relationship between Japanese products and those described in various Chinese works on Natural History. * * * * *

"With the Restoration of the Emperor to his full power, in 1868, came the wholesale reconstruction of all political institutions, and the country

has been, and is still, going through such a social revolution as has seldom been witnessed in any part of the world. Along with many other things, the old school of Natural History was swept away, as chessmen from the board at the end of a game. So far as our science is concerned, there is a complete break at this period. The modern school of Zoology dates from the appointment of Prof. E. S. Morse, of Salem, Mass., U. S. A., to the chair of Zoology at the University of Tokyo, in 1877. His indefatigable zeal and genial manners won many friends for the new science among all classes of society, while his lectures, popular or otherwise, drew attention for the first time to the immense strides which our science, under the stimulus of Darwinism, was making in the West. He, with a few students under him, also soon had in working order a tolerably good museum—the nucleus of the present Zoological and Anthropological collections of the Science College. It was also during his stay and through his care that the Tokyo Biological Society, from which the Tokyo Zoological Society is directly descended, was first organized. It is truly wonderful how much he accomplished in the brief time he was in Japan. On the return of Prof. Morse to America, he was succeeded by Prof. C. O. Whitman, now of Chicago. It was the latter who first introduced modern technical methods. These two Americans, thus stood sponsors to the modern school of Zoology in Japan.

"Since 1881, the development of Zoology in this country has been entirely in the hands of Japanese. The spirit of earnest study which signalized the Natural History School of the pre-Restoration days is happily revived, but with higher and wider purposes, and with greater facilities for successful attainment. Though only twenty years have passed since the "new departure," a vigorous school of Zoology has already sprung up. I shall perhaps not be overstepping the bounds of modesty if I say for my *confrères* that a more earnest, more enthusiastic, or more industrious set of men could with difficulty be found anywhere.

"There can be no doubt that the establishment of the Marine Station at Misaki by the Imperial University, in 1887, gave a great impetus to the study of Zoology in Japan. Situated at the point of the peninsula jutting out between the Bay of Sagami and the Bay of Tokyo, it has access to localities long since famous as the home of some remarkable forms of animal life. Along the coast, all sorts of bottoms are found, yielding a rich variety of animal forms, while the hundred-fathom line is within two or three miles of the shore, and depths of five hundred fathoms are not very difficult of approach. The existence of a remarkable deep-sea fauna in these profounder parts has been ascertained within the last few years, and zoological treasures are now being constantly hauled up. The great "Black Current" (*Kuro Shiuo*) sweeps by, not many miles out, and a branch of it often comes into the very harbor of Misaki, gladdening the heart of the Plankton explorer. Face to face with this inexhaustible treasury of animal forms, the zoologist will have to possess unusual powers of self-restraint, indeed, not to grow enthusiastic over his science.

* * * * *

"The prospects of our science in Japan have never been brighter than they are at this time. All its main branches, including applications of it to practical purposes, such as Fisheries, Sericulture, Entomology, etc., are now fairly represented. Each year will see gradual additions to the specialists of different groups, as the number of graduates from the Imperial University increases. The Marine Station at Misaki, which has become too small for our growing body, will be removed within the present year to a new site, about two miles north of its present location, and its accommodations will be considerably enlarged. While perhaps not essential to the pursuit of science, the extreme beauty of the situation, which commands a matchless view of Fujiyama and the Sagami Bay, will certainly not lessen its attractions; and an additional charm to those who are interested in the heroic achievements of the past may be found in the associations with which the spot abounds, as the ancient stronghold of a mighty warrior chieftain who was killed here in a desperate battle, after sustaining a long siege, and whose spirit is believed by the populace still to haunt the scene of his former greatness. A proposed railway, passing near the new site, will bring the station within two or three hours of Tokyo. A number of teachers scattered over different parts of the country are acting somewhat as sentinels at the outposts of our science, and doing good service in collecting animals from different localities. Our field of activity has also lately been suddenly widened by the addition of Formosa to the territory of Japan, and the work of a collector now on that island will, it is hoped, be but the forerunner of many similar undertakings."

THE DEATH OF DR. JAMES CAREY THOMAS.

Born in Baltimore, July 13, 1833.

Died in Baltimore, November 9, 1897.

The friends of Dr. James Carey Thomas, connected with the Johns Hopkins University, assembled Sunday afternoon, November 14, in Levering Hall, the rooms of the Young Men's Christian Association, for the purpose of giving expression to their sentiments of respect and affection. The Trustees, the Faculty, and the Students were represented.

The chair was taken by Mr. C. Morton Stewart, President of the Board of Trustees. A biographical sketch was read by Professor Wood, and the following minute, presented by President Gilman, was then adopted. In confirmation of what is there said, remarks were made by Dr. Welch, Dean of the Medical School, on the services of Dr. Thomas to medical education; by Professor Griffin, Dean of the Collegiate Department, on the religious characteristics of Dr. Thomas; by Professor Haupt, on his personal relations, and on his liberality toward those from whom he differed; and by Professor Remsen, on his philanthropic work.

Mr. Joshua Levering made the concluding remarks, in which he gave expression to the grief of the people of Baltimore not connected with the University, as well as of those within its walls, at the death which has come so unexpectedly.

MINUTE.

The friends of Dr. James Carey Thomas, connected with the Johns Hopkins University, assembled Sunday afternoon, November 14, 1897, for the purpose of showing their affection and respect, adopt the following minute, and request the Trustees of the University to make it a part of their official records:—

Dr. Thomas has been a Trustee of this University since 1870. He was the first person elected by the original Trustees to take a seat in the Board, and at the time of his death he was one of three, still members of the Board, who took part in the organization of this institution, on the death of the founder, nearly twenty-four years ago. He believed that Baltimore had then an opportunity such as had never before occurred in this country to establish a university of the highest character, which would be of service to the State, the country, and the world. Whatever tended toward the attainment of this ideal received from him unflinching encouragement.

He thoroughly appreciated the university spirit, and every endeavor to secure the advancement of higher education for men and for women, the

improvement of scholarship, the promotion of research, or the calling and retention of qualified professors, was sure to have his approbation and aid.

In looking back upon his services it is impossible to say in which department of work he was most interested—the literary, the scientific, or the medical. To each in turn he gave his hearty support, but his training as a physician enabled him to render noteworthy services in the organization of the School of Medicine. In recognition of this capacity the Trustees of the Hospital made him, as a member of the Medical Board, one of their professional advisers.

He traveled much, especially in England and the United States, and wherever he went he came into relations with the active and intelligent promoters of advancing knowledge, and with the leaders of public opinion. He brought home their experience and suggestions. He loved flowers, music, poetry, lectures, charities, and especially the social assemblies of his friends for religious, philanthropic, or professional conference. His Christian character was always manifest, but never in a dogmatic or oppressive aspect. In the welfare of the students, especially as it is promoted by the Young Men's Christian Association, he took a lively interest.

Although he had strong convictions, which did not quickly yield to persuasion, he allowed to others the freedom of thought and action which he claimed for himself, and he acquiesced without opposition in the conclusions to which his colleagues came. His enthusiasm was never at rest. He firmly believed that whatever obstacles the University might encounter its future was assured. This cheerful courage was inspiring to the staff of teachers. It made him their welcome adviser and their constant friend.

His simple, open, hearty greetings, his cheerful smile, his ringing voice, his dislike of forms and ceremonies, and the assurance of his sympathy, will always be remembered by those who knew him; and those who come after us, never having seen his face, will share, unconscious heirs, in methods, opportunities, and advantages due, in no small measure, to his fidelity and forethought.

As we lay upon his tomb this tribute of gratitude and affection, we recall, appropriate to his memory, these words of Lord Bacon: "It is a heaven upon earth when a man's mind rests upon Providence, moves in Charity, and turns upon the poles of Truth."

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THE JOHNS HOPKINS PRESS.

LIST OF SERIAL PUBLICATIONS.

I. American Journal of Mathematics.

This journal was commenced in 1878, under the editorial direction of Professor Sylvester. It is now conducted by Professor T. Craig as Editor, with the coöperation of Professor Simon Newcomb. Nineteen volumes of about 400 pages each have been issued, and the twentieth is in progress. It appears quarterly. Subscription \$5 per year. Single numbers \$1.50.

A very few complete sets remain. These will be sold for one hundred dollars per set.

II. American Chemical Journal.

This journal was commenced in 1879, with Professor Remsen as Editor. Nineteen volumes of about 450 pages each have been issued, and the twentieth is in progress. Ten numbers are issued yearly. Subscription \$4 per year. Single numbers 50 cents.

III. American Journal of Philology.

The publication of this journal commenced in 1880, under the editorial direction of Professor Gildersleeve. Seventeen volumes of about 570 pages each have been issued, and the eighteenth is in progress. It appears four times yearly. Subscription \$3 per volume. Single numbers \$1. Only a few sets remain in the hands of the editor.

IV. Studies from the Biological Laboratory.

The publication of these papers commenced in 1879, under the direction of Professor Martin, with the assistance of Professor W. K. Brooks. Four volumes of about 500 pages, octavo, and 40 plates each, have been issued.

V. Studies in Historical and Political Science.

The publication of these papers was begun in 1882, under the editorial direction of Professor H. B. Adams. Fifteen series are now completed and the sixteenth series in progress. Sixteen extra volumes have also been issued. Subscription \$3 per volume. A set, including the sixteen regular series and the sixteen extra volumes, will be sold for seventy dollars.

VI. Memoirs from the Biological Laboratory.

These monographs are issued under the editorial direction of Professor W. K. Brooks. Volume IV is in progress. Price for the set of three volumes twenty-five dollars.

VII. Johns Hopkins University Circulars.

The publication of these Circulars began in December, 1879, and 133 numbers have since been issued. Subscription \$1.00 per year.

VIII. Contributions to Assyriology and Comparative Semitic Philology.

The publication of these papers was begun in 1889. Professor Paul Haupt, of the Johns Hopkins University, and Professor Friedrich Delitzsch, of the University of Breslau, are the editors. Volume III in progress.

IX. The Johns Hopkins Hospital Reports.

These reports are edited by the Faculty of the Johns Hopkins Medical School and published for the Johns Hopkins Hospital. Their publication was begun in 1890. Volume VII is in progress. Subscription \$5 per volume. The set of seven volumes will be sold for thirty-five dollars.

X. The Johns Hopkins Hospital Bulletin.

The publication of these Bulletins began in 1889. Volume IX is in progress. They are published monthly. Subscription \$1.00 per year. The set of nine volumes will be sold for fifteen dollars.

XI. Modern Language Notes.

This journal is edited by Professor A. M. Elliott and his associates in the Modern Language Department. It appears monthly. The twelfth volume is in progress. Subscription \$1.50 per year.

XII. The Journal of Experimental Medicine.

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