
THE UNIVERSITY OF MINNESOTA.

THE
CALENDAR

FOR THE YEAR

1878-9.

THE ANNUAL CALENDAR, published at Commencement by authority of the Board of Regents, is a record of the condition and membership of the University for the given University year, and also contains the announcements for the University year following.

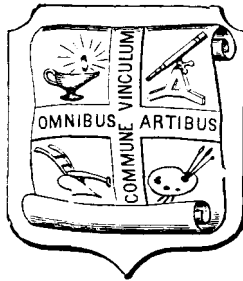
The Calendar will be sent gratuitously, postage paid, to all persons in the State who apply for it.

THE
UNIVERSITY OF MINNESOTA.

THE
CALENDAR

FOR THE YEAR

1878-9.



BY THE UNIVERSITY.

MINNEAPOLIS.

1879.

University of Minnesota.

DAYS AND DATES, 1878-9

 1878.

JUNE 6. THE VACATION BEGAN.

SEPTEMBER 10. YEAR 1877-8 BEGAN.

11. } Entrance Examinations.
12. }

13. } Examinations for advanced rank.
14. }

17. Recitations and Lectures began.

DECEMBER 3. } Examinations.
4. }

5. First Term (13 weeks) closed.

DECEMBER 10. Second Term began.

Recess

From December 21 to January 7.

1879.

MARCH 7. } Examinations.
8. }

8. Second Term (12 weeks,) closed.

11. Third Term (13 weeks,) began.

JUNE 3. } Examinations.
4. }

5. COMMENCEMENT.

For days and dates of the new year 1879-80, see Almanac near end.

THE BOARD OF REGENTS.

- The Hon. PARIS GIBSON, M. A., Minneapolis, - 1880.
*The Hon. MORRIS LAMPREY, M. A., St. Paul, - "
The Hon. RICHARD CHUTE, Minneapolis, - - "
The Hon. WILLIAM R. MARSHALL, St. Paul, - 1881.
The Hon. A. J. EDGERTON, M. A., Kasson, - - "
The Hon. HENRY H. SIBLEY, St. Paul, - - - 1882.
The Hon. THOS. S. BUCKHAM, M. A., Faribault, "

AND EX OFFICIIS,

The GOVERNOR of the State.

The Hon. JOHN S. PILLSBURY, Minneapolis.

The State Superintendent of Public Instruction,

The Hon. D. BURT, M. A., St. Paul.

The President of the University,

WILLIAM W. FOLWELL, M. A., Minneapolis.

*Died April 9th. 1879.

OFFICERS OF THE BOARD.

The Hon. HENRY H. SIBLEY, St. Paul,
PRESIDENT.

The Hon. PARIS GIBSON, Minneapolis,
Recording Secretary and Treasurer.

WILLIAM W. FOLWELL, Minneapolis,
Corresponding Secretary.

STANDING COMMITTEES.

Executive Committee—Regents PILLSBURY, GIBSON, LAMPREY,
and CHUTE.

Committee on Faculty and Courses of Study—Regents SIBLEY,
MARSHALL, BURT, BUCKHAM and EDGERTON.

Auditing Committee—Regents MARSHALL and CHUTE.

MEETINGS.

The Annual Meeting is fixed by the charter for the second Tuesday in December; other meetings occur in the Spring Recess and on Commencement Day.

The Executive Committee meet regularly on the first Tuesday evening in each month.

OFFICERS OF INSTRUCTION.

- WILLIAM W. FOLWELL, LL. D., President, *1020 5th St., S. E.*
Instructor in Political Economy, and Librarian.
- G. CAMPBELL, M. A., B. D., *204 4th St. N.*
Professor of Mental and Moral Philosophy.
- JABEZ BROOKS, M. A., D. D., *1706 Laurel Avenue, W. D.*
Professor of the Greek Language and Literature.
- EDWIN J. THOMPSON, M. A., *1123 3d St., S. E.*
Professor of Mathematics and Astronomy.
- NEWTON H. WINCHELL, M. A., *State Geologist, State St., E. D.*
Professor of Geology and Mineralogy.
- CHARLES N. HEWITT, M. D., *Red Wing.*
Professor of Public Health, Non-resident.
- MITCHELL D. RHAME, B. A., *1115 5th St., S. E.*
Professor of Civil and Mechanical Engineering.
- STEPHEN F. PECKHAM, M. A., *121 Pleasant St., E. D.*
Professor of Chemistry.
- JOHN G. MOORE, B. A., *410 3d St., S. E.*
Professor of North European Languages.
- MOSES MARSTON, M. A., *912 3d Avenue S.*
Professor of the English Language and Literature.

RICHARD W. LAING, LL. D., *727 3d St., S. E.*
 Professor of History and in charge of French.

JOHN A. LUNDEEN, U. S. A., *1003 6th St., S. E.*
 Professor of Military Science.

CHARLES Y. LACY, B. Agr., *204 4th St., S. E.*
 Professor of the Theory and Practice of Agriculture.

LOUIS W. PECK, *121 Pleasant St., S. E.*
 Assistant Professor in charge of Physics.

ROBERT H. TRIPP, M. A., *1214 5th St., S. E.*
 Professor of the Latin Language and Literature.

CHRISTOPHER W. HALL, M. A., *601 3d St., S. E.*
 Professor of Geology, Mineralogy and Biology.

MRS. AUGUSTA NORWOOD SMITH, *500 3d Ave., S. E.*
 Preceptress and Instructor in English.

JOHN C. HUTCHINSON, B. A., *Lake Street, W. D.*
 Instructor in Greek.

JOHN S. CLARKE, B. A., *414 Monroe St., E. D.*
 Instructor in Latin.

MATILDA JANE CAMPBELL, B. L., *622 5th St., S. E.*
 Instructor in Latin and German.

OTHER OFFICERS.

SAMUEL S. EUSTIS, JR., *Farmer,* *Exptl Farm.*

CHARLOTTE A. ROLLIT, *Assistant Librarian.*

FRED C. BOWMAN, *Ass't in Chemical Laboratory,* *Room 33.*

J. F. BRYANT, *Janitor, Main Building,* *Room 26.*

FACULTIES OF THE UNIVERSITY.

THE GENERAL FACULTY.

The PRESIDENT; Professors CAMPBELL, BROOKS, THOMPSON, WINCHELL, RHAME, PECKHAM, MOORE, MARSTON, (*Secretary*), LAING, LACY, PECK, TRIPP and HALL.

THE SPECIAL FACULTIES.

I. Of the College of Science, Literature and the Arts :

The PRESIDENT; Professors CAMPBELL, BROOKS, THOMPSON, (*Secretary*), WINCHELL, PECKHAM, MOORE, MARSTON, LAING, TRIPP and HALL.

II. Of the College of Mechanic Arts :

The PRESIDENT; Professors THOMPSON, WINCHELL, RHAME, (*Secretary*), PECKHAM, MARSTON, PECK and HALL.

III. Of the College of Agriculture :

The PRESIDENT; Professors WINCHELL, PECKHAM, MARSTON, LACY, (*Secretary*), and HALL.

GRADUATES.

BACHELORS IN ARTS.

Warren Clarke Eustis,	<i>Hennepin Co.</i>	1873.
Henry Martyn Williamson,	<i>Nicollet</i> "	"
George Edwin Ricker,	<i>Hennepin</i> "	1874.
Andrew Russell Cass,	<i>Canada.</i>	1875.
Julius Elliott Miner,	<i>Goodhue</i> "	"
Simon Peter Starritt,	<i>Wright</i> "	"
John Sinclair Clarke,	<i>Nova Scotia.</i>	1876.
John Corrin Hutchinson,	<i>Dakota Co.</i>	"
William Edwin Leonard,	<i>Hennepin</i> "	"
Graham Cox Campbell,	<i>Nova Scotia.</i>	1877.
Joel Nathaniel Childs,	<i>Wisconsin.</i>	"
Ebenezer Currie,	<i>Fillmore Co.</i>	"
Frank Eustis,	<i>Hennepin</i> "	"
Fred Eustis,	" "	"
Stephen Mahoney,	<i>Scott</i> "	"
John Waldo Perkins,	<i>Wright</i> "	"

Graduates.

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Charles Wilbur Savidge,	<i>Le Sueur Co.</i>	1877.
Albert McClure Welles,	<i>Ramsey</i> “	“
Julian Clarence Bryant,	<i>Nicollet</i> “	1878.
John Hamilton Lewis,	<i>Wright</i> “	“
Thomas Rogers Newton,	<i>Hennepin</i> “	“
Evan Roland Pritchard,	<i>Blue Earth Co.</i>	“
Daniel Williams,	<i>Iowa.</i>	“

BACHELORS IN SCIENCE.

Edward Chatfield,	<i>Fillmore Co.</i>	1874.
Clark Stewart,	<i>Hennepin</i> “	1875.
Samuel Addison Rank,	<i>Fillmore</i> “	“
Martha Appleton Butler,	<i>Maine.</i>	1876.
Robert Henry Crafts,	<i>Hennepin Co.</i>	“
William Herod Locke,	“ “	“
Lewis Singer Gillette,	<i>Michigan.</i>	“
Eugene Alvin Hendrickson,	“	1876.
Albert Preston Hendrickson,	<i>Ramsey Co.</i>	1877.
John Charles Kassube,	<i>Hennepin Co.</i>	“
Edwin Burnham Pribble,	“ “	“
Fred Leslie Couillard,	“ “	1878.
Nettie Getchell,	“ “	“
Judson Torrey Howell,	<i>Houston</i> “	“
Mary Warwick Robinson,	<i>Hennepin</i> “	“
Harvey Jay Smith,	<i>Goodhue</i> “	“
Myron DeVere Taylor,	<i>Stearns</i> “	“

William John Warren,	<i>Rice Co.</i>	1878.
Henry Clay Leonard,	(<i>B. C. E.</i> , 1875,)	"

BACHELORS IN LITERATURE.

Helen Mar Ely,	<i>Winona Co.</i>	1875.
Matilda Jane Campbell,	<i>Maine.</i>	1877.
Viola Fuller,	<i>Mower Co.</i>	"
Charlotte Adelaide Rollit,	<i>Hennepin Co.</i>	"
Mary Anna Maes,	" "	1878.
George Albert Wood,	<i>Fillmore</i> "	"

BACHELORS IN CIVIL ENGINEERING.

Henry Clay Leonard,	<i>Fillmore Co.</i>	1875.
Samuel Addison Rank,	" "	"
Clark Stewart,	<i>Hennepin Co.</i>	"
Lewis Singer Gillette,	<i>Michigan.</i>	1876.
Eugene Alvin Hendrickson,	<i>Ramsey Co.</i>	"
Charles Edward Thayer,	<i>Hennepin Co.</i>	"

BACHELOR IN MECHANICAL ENGINEERING.

Charles Spencer Bushnell,	<i>Hennepin Co.</i>	1878.
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BACHELOR IN ARCHITECTURE.

Walter Stone Pardee,	<i>Hennepin Co.</i>	1877.
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STUDENTS.

ALPHABETICAL ROLL, 1878-9.

Adams, Elmer Ellsworth	<i>Morrisville, Vt.</i>	Classical, IV.
Aiton, George Briggs	<i>St. Peter.</i>	Classical, I.
Aiton, Jeanie Lincoln	"	Modern, IV.
Alden, Elizabeth Emma	<i>Minneapolis.</i>	Modern, III.
Alexander, Jane Amelia	"	Scientific, III.
Alexander, Mary Ellen	"	Scientific, IV.
Allen, Emma Frances	<i>Hamilton.</i>	Modern, II.
Anderson, George William	<i>Featherstone.</i>	Scientific, IV.
Anderson, Samuel Gilmore	<i>Eden Prairie.</i>	Classical, I.
Anson, Frank Henry	<i>Minneapolis.</i>	Modern, I.
Backus, Edward	<i>Featherstone.</i>	Scientific, IV.
Backus, George Joseph	"	Scientific, II.
Baker, Asa Kneeland	<i>St. Paul.</i>	Special.
Baldwin, Otway Wilkinson	<i>Minneapolis.</i>	Classical, I.
Bardwell, Fred Leslie	"	Special.
Barnard, Frank Marshall	"	Scientific, II
Barrett, Walter Scott	<i>Wasioja.</i>	Scientific, Sen.

Barrett, William Johnson	<i>Wasioja.</i>	Scientific, II.
Bassett, William Lincoln	<i>Minneapolis.</i>	Modern, Sen.
Baxter, Chauncey Luther	<i>Carver.</i>	Special.
Beede, Edgar Comstock	<i>Minneapolis.</i>	Classical, IV.
Bell, Robert Mowry	<i>Sauk Center.</i>	Scientific, IV.
Berry, Frederick Gerald	<i>Brooklyn.</i>	Scientific, Jun.
Blanding, Seymour William	<i>St. Croix Falls, Wis.</i>	Sci., IV.
Bonniwell, Agnes Virginia	<i>Hutchinson.</i>	Special.
Bonniwell, Harlow Horace	"	Special.
Bowman, Fred Capin	<i>Litchfield.</i>	Scientific, Sen.
Bowman, George Paris	<i>Minneapolis, Tp. W.</i>	Classical IV.
Bray, Clara Augusta	"	Modern, IV.
Bray, Newton James	<i>Norwood.</i>	Scientific, III.
Brewis, John James	<i>Bloomington.</i>	Special.
Brockway, Anna	<i>Laramie City, Wy.</i>	Special.
Brohough, Gustav Olsen	<i>Hay Creek.</i>	Classical, IV.
Brooks, Adin Pease	<i>Minneapolis.</i>	Classical, Jun.
Brooks, Anna Eliza	"	Classical, IV.
Brooks, David Denslow	"	Classical, I.
Brooks, Olive Emma	"	Classical, II.
Broughton, Herbert John	"	Scientific, I.
Brown, Addie	"	Special.
Brown, Cora Inez	"	Special.
Brown, Fred Henry	<i>Monticello.</i>	Scientific, III.
Bryant, James Francis	<i>St. Peter.</i>	Classical, Jun.

Bryant, William Cullen	<i>St. Peter.</i>	Classical, I.
Bullis, Charles Henry	<i>Decorah, Ia.</i>	Modern, IV.
Burke, Charles Bertram	<i>Norseland.</i>	Classical, IV.
Burnes, Catherine Amelia	<i>Minnetonka.</i>	Scientific, Sen.
Burrill, Nettie Ellen	<i>Champlin.</i>	Modern, IV.
Byrnes, Timothy Edward	<i>Kingston.</i>	Scientific, Sen.
Camp, Addie Louise	<i>Minneapolis.</i>	Modern, II.
Campbell, Margaret Agnes	<i>Mid. Stewiacke, N. S.</i>	Modern I.
Carpenter, Bertram Wendell	<i>Owatonna.</i>	Scientific, IV.
Carville, George Grey	<i>Faribault.</i>	Mech. Eng., Sen.
Catherwood, Samuel Doak	<i>Austin.</i>	Scientific, III.
Catherwood, Thomas Lowry	"	Special.
Chambers, William Henry	<i>Bloomington.</i>	Special.
Champlin, Evelyn May	<i>Maple Grove.</i>	Scientific, Sen.
Choate, Nellie Quarles	<i>Boston, Mass.</i>	Special.
Chowen, Herbert Oscar	<i>Minneapolis.</i>	Classical, III.
Chute, William Young	"	Scientific, IV.
Clarke, Frederic Henry	<i>St. Cloud.</i>	Scientific, IV.
Cobb, Henry Ridgeway	<i>Minneapolis.</i>	Classical, II.
Cochrane, John McDowell	"	Classical, III.
Collom, John Franklin	"	Classical, Sen.
Cook, Cyrus Abraham	<i>Cannon Falls.</i>	Modern, III.
Cook, Frank Willis	<i>Minneapolis.</i>	Scientific, II.
Coolbaugh, Ellen Louise	"	Modern, I.
Crafts, Lettie May		Modern, I.

Crump, Samuel Delos,	<i>Janesville.</i>	Scientific, IV.
Curtis, Grace Webster	<i>Decorah, Ia.</i>	Modern, II.
Cushing, Clara Elizabeth	<i>Afton.</i>	Modern, IV.
Dart, Walter Scott	<i>Owatonna.</i>	Scientific, IV.
Dawley, Lillian Edna	<i>Lake City.</i>	Modern, III.
Dawley, William Sanborn	"	Civil Eng., Sen.
Day, Cora	<i>Minneapolis.</i>	Special.
Demmon, Alice Elizabeth	"	Scientific, III.
Dexter, Laura Belle	"	Modern, II.
Dickerman, Arthur Edwin	<i>Decorah, Ia.</i>	Modern, II.
Dickerman, Walter Herbert	"	Modern, IV.
Donnell, Edwin Cone	<i>Sheepscot Bridge, Me.</i>	Clas., IV.
Door, Norman Arthur	<i>Mankato.</i>	Scientific, IV.
Dow, Abbie Lena	<i>Minneapolis.</i>	Modern, IV.
Eastwood, John Samuel	"	Scientific, IV.
Elliot, Etta Medora	"	Classical, Sen.
Elwell, George Herbert	<i>Cottage Grove.</i>	Classical, III.
Elwell, Mary Whitmore	"	Scientific, IV.
Ensign, Mary Phebe	<i>Duluth.</i>	Special.
Fay, William Eastman	<i>Minneapolis.</i>	Classical, IV.
Featherstone, Joseph Stowe	<i>Featherstone.</i>	Scientific, IV.
Felt, Carrie May	<i>Minneapolis.</i>	Special.
Fischer, Gustav	<i>New Ulm.</i>	Scientific, II.
Flaherty, Stephen Augustine	<i>Chilton, Wis.</i>	Scientific, IV.
Fleming, Calvin Albert	<i>Garden City.</i>	Modern, II.

Fletcher, Carrie Delania	<i>Mankato.</i>	Special.
Florer, Clara Constance	<i>Wabasha.</i>	Special.
Folsom, Roswell	<i>Minneapolis.</i>	Scientific, III.
Folwell, Mary Heywood	"	Scientific, IV.
Foster, Scott Arthur	<i>Hyde Park.</i>	Scientific, II.
Frost, Edward Richie	<i>Thomasville, Ga.</i>	Special.
Furber, Pierce Power	<i>Cottage Grove.</i>	Civ. Eng., Sen.
Gage, Addison Jr.	<i>Anoka.</i>	Scientific, Sen.
Gale, Edward Chenery	<i>Minneapolis.</i>	Classical, II.
Gallagher, Catherine Louisa	"	Modern, IV.
Gibson, Theodore	"	Classical, IV.
Girling, Charles Ignatius	"	Special, Agr.
Goodnow, John Finley	"	Classical, Sen.
Goodrich, Mary Ellen	"	Special.
Gould, Annie Evelyn	"	Modern, III.
Gray, James Edwin	<i>Lake City.</i>	Scientific, III.
Greeley, Horace Burnham	<i>Mapleton.</i>	Scientific, Jun.
Greer, Allen Jay	<i>Lake City.</i>	Scientific, Sen.
Grimes, Charles Melvin	<i>Minneapolis, Tp.</i>	Modern, II.
Grimes, Emma Elizabeth	" "	Modern, I.
Grimes, George Sutherland	" "	Scientific, I.
Hackett, Arthur Goodwin	<i>Lake City.</i>	Special.
Hale, Charles Elmer	<i>Baiting Hollow, N. Y.</i>	Special.
Ham, Frank Wells	<i>Minneapolis.</i>	Classical, III.
Hancock, James Otis	<i>Red Wing.</i>	Classical, II.

Harrington, Martha Addie	<i>Hutchinson.</i>	Special.
Harrington William Edmund	"	Special.
Haseltine, George Colby	<i>Minneapolis.</i>	Scientific, III.
Hasselquist, Joshua	<i>Rock Island, Ills.</i>	Scientific, IV.
Hathaway, Cora Belle	<i>Pleasant Grove.</i>	Modern, IV.
Hauser, Warren	<i>Glencoe.</i>	Classical, II.
Hayes, Emma Louise	<i>Minneapolis.</i>	Modern, III.
Hayward, William Henry	<i>St. Cloud.</i>	Special.
Healy, Frank	<i>Preston.</i>	Classical, II.
Healy, Peter Joseph	<i>Fountain.</i>	Modern, III.
Heath, Addie Maria	<i>Lincoln.</i>	Scientific, III.
Heath, Samuel Fuller	"	Scientific, II.
Hendrickson, Emma Laura	<i>St. Paul.</i>	Modern, II.
Hendrickson, George Lorenzo	"	Scientific, IV.
Henry, Marie Louise	<i>Minneapolis.</i>	Modern, II.
Herrick, Clarence Luther	"	Scientific, I.
Hessian, Arthur	<i>St. Peter.</i>	Scientific, IV.
Hessian, John	"	Scientific, IV.
Hildreth, Alvin	<i>Sumner.</i>	Modern, Sen.
Hill, Franklin	<i>Pine Island.</i>	Classical, IV.
Hill, Frank Willard	<i>Minneapolis.</i>	Scientific, III.
Hill, Helen Miriam	"	Modern, III.
Hilyer, Andrew Franklin	"	Classical II.
Hinds, George	<i>Shakopee.</i>	Scientific, III.
Hinds, William	"	Scientific, IV.

Hoage, William Ricketson	<i>Rochester.</i>	Scientific, III.
Holbrook, Frank Wayland	<i>Le Sueur.</i>	Scientific, III.
Hollister, Louise Elma	<i>Marsfield.</i>	Scientific, IV.
Holt, Andrew	<i>Carver.</i>	Modern, Jun.
Holt, Arthur Graves	<i>Chatfield.</i>	Classical, IV.
Holt, Carrie Warner	"	Classical, II.
Holt, Lydia Rossiter	"	Classical, II.
Holt, Mary Eliza	"	Modern, II.
Hopkins, Lucy Bridges	<i>Duluth.</i>	Special.
Horton, Joseph Elisha	<i>Preston.</i>	Modern, Jun.
House, Elizabeth Augusta	<i>Minneapolis.</i>	Modern, Jun.
Howard, George Franklin	<i>Rochester.</i>	Scientific, IV.
Hughes, Martha Frances	<i>Minneapolis.</i>	Classical, I.
Hughes, Mary Nancy	"	Modern, II.
Hughes, William Franklin	<i>Butternut Valley.</i>	Modern, IV.
Hutchinson, Joseph Henry	<i>Hastings.</i>	Classical, IV.
Ingersoll, George Edmund, C.E.	<i>St. Paul.</i>	Special. (Chem.)
Ives, Arthur Harvey	<i>Minneapolis.</i>	Scientific, IV.
Jamison, Robert	<i>Red Wing.</i>	Scientific, I.
Jefferson, Annie Harriet	<i>Minneapolis.</i>	Modern, III.
Johnson, Frank Ames	<i>Marshall.</i>	Scientific, IV.
Johnson, Richard Hartwell	<i>St. Charles.</i>	Modern, II.
Jones, David Percy	<i>Minneapolis.</i>	Classical, III.
Jones, Edward Corydon	"	Scientific, III.
Jones, Elizabeth	<i>Lime Springs, Ia.</i>	Modern, IV.

Jones, Richard Saxe	<i>Rochester.</i>	Scientific, III.
Jones, William Hugh	<i>Mankato.</i>	Classical, III.
Juni, Benedict	<i>Milford.</i>	Special.
Kennedy, Katie Louise	<i>Minneapolis.</i>	Modern, III.
Kennedy, Joseph	<i>Oshawa.</i>	Scientific, II.
Kent, Charles Edward	<i>Toledo, Ohio.</i>	Classical, I.
Kerr, Joseph Howe	<i>Canning, N. S.</i>	Classical, III.
Keysor, William Winchester	<i>Mankato.</i>	Modern, Sen.
Kiefer, Augusta Elizabeth	<i>St. Paul.</i>	Special.
Kilbourne, Louise Lillian	<i>Minneapolis.</i>	Modern, II.
King, James Charles Elliot	<i>Otsego.</i>	Scientific, IV.
King, Royal Fairfield	<i>Mexico, N. Y.</i>	Classical, IV.
King, William Leslie	<i>Garden City.</i>	Classical, I.
Kingman, Joseph Ramsdell	<i>Minneapolis.</i>	Classical, III.
Klepper, George Horace	<i>Stillwater.</i>	Scientific, IV.
Knox, Frances Ada	<i>Spring Valley.</i>	Classical, Jun.
Kreis, Laura Augusta	<i>Monticello.</i>	Modern, I.
Lang, Henry David	<i>St. Paul.</i>	Modern, II.
Lang, William Anthony	"	Modern, II.
Lawrence, Annie Laurie	<i>Minneapolis.</i>	Modern, III.
Lawrence, Bessie Sumner	"	Modern, I.
Lawrence, Cora Eliza	"	Scientific, IV.
Lawson, Charles William	<i>Anoka.</i>	Classical, III.
Laythe, Bessie	<i>Chatfield.</i>	Scientific, IV.
Leavens, Frank Nichols	<i>Faribault.</i>	Classical, II.

Lewis, George John	<i>Butte City, Mon.</i>	Scientific, IV.
Lewis, George Winthrop	<i>Red Wing.</i>	Classical, III.
Lewis, John Robert	<i>Bristol.</i>	Classical, III.
Linton, Laura Alberta	<i>Cook's Valley.</i>	Scientific, Sen.
Linton, Sarah Virginia	"	Modern, II.
Linton, William Beans	"	Scientific, II.
Locke, Cassius Marcius	<i>Minnetonka.</i>	Scientific, IV.
Locke, Joseph Henry	<i>St. Cloud.</i>	Classical, IV.
Lowry, Lucinda Ann	<i>Oakland.</i>	Scientific, III.
Loy, George John	<i>Chaska.</i>	Scientific, IV.
Lynch, Delilah	<i>Austin.</i>	Scientific, IV.
McClure, Clarendon Parker	<i>St. Cloud.</i>	Modern, III.
McCoy, Frank Wilber	<i>Zumbrota.</i>	Scientific, IV.
McGaughey, Margaret Elizabeth	<i>Minneapolis.</i>	Modern, III.
McKean, Frank Smith	<i>Lakeland.</i>	Classical, Sen.
McMillan, Emily Dana	<i>Minneapolis.</i>	Modern, II.
McNear, Nellie Frances	<i>Wiscasset, Me.</i>	Modern, IV.
McNair, Benedict Poitiaux	<i>Minneapolis.</i>	Scientific, III.
McNair, Sarah Pierrepont	"	Modern, III.
Maes, Emma Ernestine	"	Modern, I.
Malchow, Charles William	"	Scientific, IV.
Manchester, James Eugene	<i>Blooming Prairie.</i>	Scientific, IV.
Marston, Anna Calista	<i>Minneapolis.</i>	Modern, III.
Mathes, Edwin Howard	<i>Okaman.</i>	Elm. Agr., IV.
Mattson, Nanny Adelia	<i>Minneapolis.</i>	Special.

Merriman, Orlando Crosby Jr.	<i>Minneapolis.</i>	Scientific, III.
Miller, Sarah Reubanna	<i>Parkesburg, Pa.</i>	Scientific, IV.
Mixer, Carrie Louise	<i>Unionville, Ohio.</i>	Special.
Montgomery, Frank Hugh	<i>St. Cloud.</i>	Special.
Moore, Laura Belle	<i>Minneapolis.</i>	Modern, III.
Morey, Madison A.	<i>Farmington,</i>	Special, (Chem.)
Morris, Evan	<i>Bristol.</i>	Classical, III.
Morris, Thomas	"	Classical, II.
Moses, William Elias	<i>Northfield.</i>	Scientific, IV.
Moulton, Amelia Christiana	<i>Monticello.</i>	Scientific, IV.
Moutoux, Charles Frederic	<i>Newport.</i>	Classical, IV.
Muckey, Floy Sumner	<i>Medford.</i>	Special.
Nachtrieb, Henry Francis	<i>Pittsburgh, Pa.</i>	Scientific, IV.
Nunn, Alexander Hamilton	<i>Claremont.</i>	Classical, II.
Nunn, Janet	"	Modern, III.
O'Leary, Bridget Isabella	<i>Mendota.</i>	Scientific, III.
Paine, Asa	<i>N. P. Junction.</i>	Scientific, IV.
Palmer, Sarah Ellen	<i>Shell Rock.</i>	Scientific, I.
Pardee, Mary Alice	<i>Minneapolis.</i>	Modern, IV.
Parkinson, John B., C. E.	<i>St. Paul.</i>	Special,(Chem.)
Parsons, Frederic D.	<i>Faribault.</i>	Scientific, IV.
Partridge, Earl	<i>Winona.</i>	Classical, I.
Partridge, George Henry	"	Scientific, Sen.
Payne, James Adams	<i>Champlin.</i>	Classical, III.
Pemberton, John	<i>St. Paul.</i>	Special.

Perkins, Augusta Maria	<i>Minneapolis.</i>	Modern, II.
Perkins, Charles Emmons	<i>Featherstone.</i>	Scientific, IV.
Perry, William Henry	<i>Morris,</i>	Special.
Peters, Henry Edward	<i>Minneapolis.</i>	Special.
Peters, William George	"	Scientific, III.
Peterson, Albertine Virginia	"	Scientific, IV.
Petri, Carl John	<i>Rockford, Ills.</i>	Special.
Phelps, Jessie Fremont	<i>Ottumwa, Iowa.</i>	Special.
Phillips, Bradley Jr.	<i>Hudson, Wis.</i>	Special.
Phillips, William James	"	Scientific, IV.
Pickett, Eli Milton Skiff	<i>Albert Lea.</i>	Classical, II.
Pierce, Helen Louise	<i>Minneapolis.</i>	Classical, III.
Pillsbury, Addie Eva	"	Modern, II.
Pound, Charles Lord	<i>Owatonna.</i>	Scientific, II.
Powell, Jane Marvin	<i>St. Cloud.</i>	Special.
Powers, Ora Louisa	<i>Excelsior.</i>	Scientific, IV.
Pratt, Fred Stuart	<i>Rush City.</i>	Scientific, III.
Pratt, Grace Mansfield	"	Special.
Pratt, Tracy Wilder	<i>Red Wing.</i>	Scientific, IV.
Prosser, Hamline Rasselas	<i>Spring Valley.</i>	Scientific, II.
Pye, James	<i>Minneapolis.</i>	Special.
Rankin, Albert William	<i>St. Peter.</i>	Classical, Jun.
Relf, Henry Clark	<i>Superior, Wis.</i>	Classical, IV.
Reynolds, Fred	<i>Detroit.</i>	Modern, II.
Reynolds, Minnie Aurora	"	Scientific, Jun.

Rhame, Edward Davison	<i>E. Rockaway, N. Y.</i>	Scientific, III.
Rhames, Robert William	<i>St. Charles.</i>	Classical, Sen.
Rich, Edson Clyde	<i>Monticello.</i>	Scientific, IV.
Richards, David	<i>Mankato.</i>	Special.
Richardson, Ella Victoria	<i>Le Sueur.</i>	Scientific, III.
Richardson, Laura Martha	"	Scientific, III.
Riheldaffer, John Henry	<i>St. Paul.</i>	Scientific, III.
Roberts, Thomas Sadler	<i>Minneapolis.</i>	Scientific, I.
Robinson, Garland Green	<i>Kingston.</i>	Scientific, III.
Rockwood, Chelsea Joseph	<i>Garden City.</i>	Classical, Sen.
Rockwood, Hattie Imogene	"	Modern, III.
Rockwood, Julia Maria	"	Special.
Roe, Alva Lucius	<i>Afton.</i>	Scientific, I.
Roe, Marion Hooker	"	Modern, Sen.
Rollit, Caroline	<i>Minneapolis.</i>	Modern, Sen.
Rowley, Henry Ward	<i>Farmington.</i>	Scientific, III.
Rowley, Quentin John	<i>Oakland.</i>	Classical, I.
Sabin, Esther Augusta	<i>Monticello.</i>	Scientific, IV.
Salisbury, George Nelson	<i>Faribault.</i>	Scientific, III.
Sanford, David Jr.	<i>St. Paul.</i>	Classical, III.
Savidge, William Hines	<i>Cleveland.</i>	Special.
Sawyer, Nettie	<i>Chatfield.</i>	Classical, II.
Schmidt, Charles Christian	<i>Eyota.</i>	Scientific, III.
Sheldon, Charles Hopkins	<i>Excelsior.</i>	Scientific, III.
Sheldon, Frank Stewart	"	Classical, IV.

Sheldon, Martha Alma	<i>Excelsior.</i>	Classical, III.
Shenton, Willard Henry	<i>Minneapolis.</i>	Modern, II.
Shumway, Edgar Edmund	<i>Wilmington.</i>	Scientific, IV.
Shumway, Herbert Paine	"	Scientific, II.
Sidener, Charles Frederick	<i>Red Wing.</i>	Special.
Smith, Frederick Addison	<i>St. Paul.</i>	Special.
Smith, Fred Wallace	<i>Minneapolis.</i>	Classical, IV.
Smith, Gilman Walter	<i>Red Wing.</i>	Scientific, Jun.
Smith, Harvey Page	"	Scientific, Jun.
Smith, Harriet Isabel	<i>Minneapolis.</i>	Modern, III.
Smith, Hettie Augusta	"	Modern, III.
Smith, Louis Orville	<i>Le Sueur.</i>	Scientific, III.
Snyder, Fred Beal	<i>Minneapolis.</i>	Classical, I.
Souther, Mary Ella	<i>Troy.</i>	Modern, IV.
Spear, Luther Wesley	<i>Minneapolis.</i>	Scientific, IV.
Spooner, Elizabeth Emma	"	• Modern, III.
Staples, Frank Downing	<i>Osceola Mills, Wis.</i>	Scientific, IV.
Stockenström, Carl Herman v.	<i>Stockholm, Sweden.</i>	Special.
Strong, Harry Amy	<i>Decorah, Iowa.</i>	Modern, II.
Sweat, Jessie May	<i>Brownfield, Me.</i>	Special.
Swett, Ella Augusta	<i>Minneapolis.</i>	Modern, III.
Thompson, Clara Ella	"	Special.
Thompson, Etta	"	Scientific, Sen.
Thompson, George Burt	"	Classical, Sen.
Thompson, John	"	Classical, IV.

Tidd, Addie Anna	"	Special.
Todd, Lillian Sanborn	"	Scientific, Jun.
Town, Eva	<i>Owatonna.</i>	Modern, I.
Townsend, George Horace	<i>Minneapolis.</i>	Special.
Townsend, Samuel Denton	<i>Pine Island.</i>	Special.
Trout, Hollis Cassius	<i>Springfield, Ohio.</i>	Scientific, IV.
Trussell, Emma Frances	<i>Champlin.</i>	Modern, III.
Trussell, Sumner Lincoln	"	Classical, III.
Tupper, Edward Augustus	<i>Zumbrota.</i>	Special.
Tupper, William G. Wheeler	"	Special.
Van Cleve, Carl Ernest	<i>Minneapolis.</i>	Classical, III.
Van Nest, Robert	" <i>Tp.</i>	Modern, IV.
Waite, Harriet Mary	<i>Byron.</i>	Classical, IV.
Webster, Charles Myron	<i>Red Wing.</i>	Classical, II.
Weeks, Edith Vincent	<i>Minneapolis.</i>	Modern, III.
West, Alice Mary	"	Modern, III.
West, Martha Isabel	"	Modern, Sen.
West, Paul	<i>St. Cloud.</i>	Scientific, III.
West, Willis Mason	"	Classical, Sen.
Whitney, Edward D. Neill	<i>Minneapolis.</i>	Scientific, II.
Wilcox, Asa Stearns	"	Modern, II.
Wilkins, Florence Elizabeth	<i>Medford.</i>	Modern, IV.
Williams, Lillie Ruth	<i>Brooklyn Center.</i>	Scientific, I.
Williams, Mary Ellen	<i>Lime Springs, Ia.</i>	Scientific, IV.
Williams, Robert Statham	<i>Minneapolis.</i>	Scientific, III.

Williams, William Henry	<i>Cambria, Wis.</i>	Classical, IV.
Williams, William Wadsworth	<i>Lime Springs, Ia.</i>	Classical, Jun.
Wilson, Edith Belle	<i>Minneapolis.</i>	Modern, III.
Wilson, James Geddes	<i>Dover Center.</i>	Special, Agr.
Wilson, Jesse Craig	<i>Dundas.</i>	Classical, II.
Winterer, Herman	<i>Le Sueur.</i>	Scientific, IV.
Wood, George Albert, B. L.,	<i>Elliota.</i>	Special, Agr.
Woodmansee, Blanche	<i>St. Paul.</i>	Modern, III.
Woodmansee, Charles Comstock	"	Scientific, IV.
Wyman, Addie	<i>Minneapolis.</i>	Special.
Yarnall, George Henry	<i>Philadelphia, Pa.</i>	Classical, IV.
Young, Edward Theodore	<i>Arlington.</i>	Scientific, III.
Zwinggi, Emma	<i>St. Peter.</i>	Scientific, IV.

ADDITIONAL, ABSENT WITH LEAVE.

Alden, William Henry	<i>St. Cloud.</i>	Scientific, III.
Bodeen, Peter Paul	<i>Stillwater.</i>	Special.
Bradford, William	<i>Maple Plain.</i>	Scientific, IV.
Buell, Dwight Allen	<i>Caledonia.</i>	Scientific, IV.
Burnes, Diana	<i>Minnetonka.</i>	Scientific, I.
Cobb, John Webster	<i>Minneapolis.</i>	Special.
Cooper, Mary Annie Eliza	<i>Wasioja.</i>	Scientific, III.
Doten, Albert Edward	<i>Kedron.</i>	Classical, IV.
Ensign, Julia Maria	<i>Duluth.</i>	Modern, III.
Foster, Fred Hascal	<i>Minneapolis.</i>	Classical, Jun.

Foster, Fred Platt	<i>Hyde Park.</i>	Scientific, IV.
Goodall, Georgiana Ella	<i>Garden City.</i>	Modern, IV.
Gould, James Bennett	<i>Eden Prairie.</i>	Classical, III.
Greeley, Eddy Horace	<i>Owatonna.</i>	Scientific, III.
Hall, Ida Adelia	<i>Dodge Center.</i>	Scientific, IV.
Hall, Alberton Heath	<i>Minneapolis.</i>	Classical, I.
Hall, Pearl Mitchell	"	Scientific, III.
Harriman, William Kimball	<i>Corrina.</i>	Special.
Jennison, James	<i>Red Wing.</i>	Scientific, I.
Kirkwood, Louise Adelaide	<i>Crystal Lake.</i>	Modern, II.
Kuhlman, Etna	<i>New Uln.</i>	Scientific, IV.
Leonard, Anna Jane	<i>Washington.</i>	Scientific, II.
Locke, David Albert	<i>Minnetonka.</i>	Scientific, III.
Locke, Samuel Allen	"	Scientific, II.
Manderfeld, Anthony Albert	<i>New Uln.</i>	Special.
Martin, Edward Philetus	<i>Mankato.</i>	Classical, III.
Rowley, Loron Thomas	<i>Oakland.</i>	Classical, IV.
Smith, George Babcock	<i>St. Cloud.</i>	Special.
Thompson, Ellen Rebecca	<i>Spring Valley.</i>	Scientific, II.
Washburn, Emma	<i>Blooming Prairie.</i>	Scientific, III.
Washburn, Sanford Seth	" "	Scientific, II.

SUMMARY—1878-9.

COLLEGE OR DEPARTMENT.	CLASS.	Gentlemen	Ladies.	TOTALS.
SCIENCE, LITERATURE AND ARTS,	{ Senior,	16	8	24
	{ Junior,	11	4	15— 39
MECHANIC ARTS,	{ Senior,	3		3— 3
	{ Junior,			
AGRICULTURE,	{ El. Course,	1		1
	{ Special,	3		3— 4
COLLEGIATE DEPARTMENT, .	{ First,	19	12	31
	{ Second,	37	20	57— 88
	{ Third,	52	33	85—
	{ Fourth,	73	32	105—190
	{ Special,	38	24	62— 62
TOTALS,		253	133	386

OR BY CLASSES ONLY,

SENIORS—OF ALL DEPARTMENTS,	27
JUNIORS—OF ALL DEPARTMENTS,	15
SOPHOMORES— FIRST CLASS, COLLEGIATE DEPARTMENT,	31
FRESHMEN— SECOND CLASS, “ “	57—130
PREPARATORY, { THIRD CLASS, “ “	85
{ FOURTH CLASS, “ “	105—190
SPECIAL AND AGRICULTURAL,	66— 66
TOTAL,	386

THE UNIVERSITY.

HISTORICAL.

In the act erecting the Territory of Minnesota, approved March 9th, 1849, the Congress of the United States granted two townships of public lands for the endowment of a university.

The Territorial Legislature of 1851, on the thirteenth day of February, passed an act providing for the establishment of "an institution under the name and style of 'THE UNIVERSITY OF MINNESOTA,' " and for its location "at or near the Falls of St. Anthony."

The State Constitution, adopted by the people on the thirteenth day of October, 1857, confirmed the previous action, as follows:

"THE LOCATION OF THE UNIVERSITY OF MINNESOTA, AS ESTABLISHED BY EXISTING LAWS, IS HEREBY CONFIRMED, AND SAID INSTITUTION IS HEREBY DECLARED TO BE THE UNIVERSITY OF THE STATE OF MINNESOTA. ALL THE RIGHTS, IMMUNITIES, FRANCHISES AND ENDOWMENTS HERETOFORE GRANTED OR CONFERRED, ARE HEREBY PERPETUATED UNTO THE SAID UNIVERSITY; AND ALL LANDS WHICH MAY BE GRANTED HEREAFTER BY CONGRESS, OR OTHER DONATIONS FOR SAID UNIVERSITY PURPOSES, SHALL VEST IN THE INSTITUTION REFERRED TO IN THIS SECTION."—*Article VII, Sec. 4, p. 37 of the General Statutes of Minnesota, 1869.*

An effort was thereupon made to organize and open the institution. A plan of a building was adopted, and a portion of it erected, but no scholastic work was undertaken. The financial revulsion of 1857-8, followed closely by the war of the rebellion, checked the progress of the enterprise, and left the institution heavily incumbered.

In 1864 the Legislature appointed a special commission, composed of Hon. John S. Pillsbury, Hon. John Nichols, Hon. O. C. Merriman, to liquidate the accumulated indebtedness, by selling a portion of the public lands. About fourteen thousand acres were disposed of, and all debts and obligations were discharged.

The University dates its actual organization from the law of the State approved February 18th, 1868, entitled "An Act to reorganize the University of Minnesota, and to establish an Agricultural College therein." This act, as modified in some details by an act approved March 4th, 1872, may be found printed in full in the Calendar for the University year 1874-5. The acts referred to may be said to constitute the CHARTER of the University.

The seventh section, placing the income to be derived by the State from the so-called "Agricultural College" land grant, at the disposal of the Board of Regents, imposes upon them, by obvious implication, the duty of carrying out the provisions of the act of Congress making that grant, referred to in said section. This act forms Chapter cxxx of the laws of the United States, 1862, and is entitled "An act donating public lands to the several States and Territories which may provide Colleges for the benefit of Agriculture and the Mechanic Arts." The full text may be found in the Calendar for 1874-5.

A preparatory department was opened in October, 1867. In 1869 the first faculty, consisting of a president and eight professors, was formed and the first college class was organized. The first annual Commencement was held June 19th, 1873.

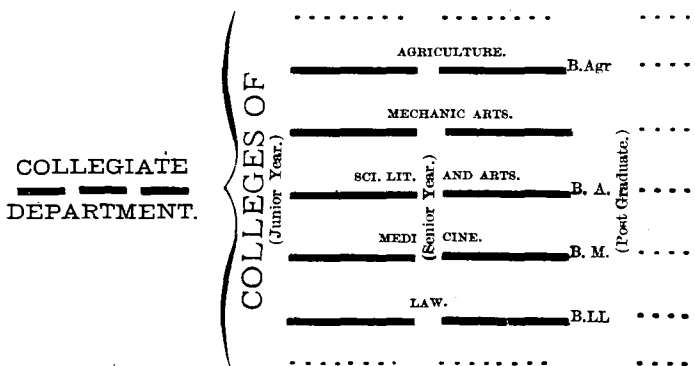
GENERAL PLAN.

Under the organic law the Board of Regents are authorized to establish any desired number of departments or colleges, the following, however, being specified:

- "A DEPARTMENT OF ELEMENTARY INSTRUCTION;
- "A DEPARTMENT OF SCIENCE, LITERATURE AND THE ARTS;
- "A COLLEGE OF AGRICULTURE;
- "A COLLEGE OF MECHANIC ARTS;
- "A COLLEGE OR DEPARTMENT OF MEDICINE;
- "A COLLEGE OR DEPARTMENT OF LAW."

The Colleges of Law and Medicine have not yet been organized.

The relative positions of these colleges or departments are illustrated by the following diagram:



The Department of Elementary Instruction, otherwise designated, by virtue of a by-law of the Board of Regents,

“THE COLLEGIATE DEPARTMENT,”

is introductory to the permanent colleges of the University. It includes, together with the work of the freshman and sophomore classes of the ordinary college courses, the remainder of the old Preparatory Department, so long as any may be retained. In common with the colleges and universities of the newer States, the institution has been obliged to carry a large amount of preparatory work. Two years of such work having been already dropped, the sub-freshman now remains as the lowest class.

This arrangement of departments emphasizes and formulates the growing tendency and custom of American colleges and universities to make the close of the second or sophomore year a branching point for certain professional or technical courses, and for the introduction of optional studies. It pre-supposes a separation of the secondary and superior epochs of education, and a corresponding assortment of studies. The high schools and other “fitting schools” of the State are thus invited to extend their work substantially up to the junior year. When this shall have been generally done, the University will, as provided by law, dispense with the whole of the Department of Elementary Instruction, and will extend her work on post-graduate ground. In the meantime the elementary work of the University will begin at the point where the schools of the State leave off.

The general plan of the University contemplates a group or federation of distinct colleges, having each its own organization, faculty, buildings and equipment. Among the advantages claimed for this general plan may be named the following:

1. A faithful adherence to the letter and spirit of the laws, state and national, which have established and endowed the University, and which contemplate it as a federation of literary, professional and industrial colleges.

2. That, while offering the old college curriculum and discipline in their best forms to the literary and professional classes, the University will provide for the industrial classes that "liberal and practical education" required by law and public sentiment.

3. The separation of the natural epochs of secondary and superior education, and the ultimate liberation of the University from the elementary work of the former: and coinciding with this division, an advantageous assortment of studies, methods and discipline suitable to the two periods respectively.

4. A close and vital articulation of the University with the public school system of the state.

5. The elevation of the high schools by enlarging the recognized sphere of their instruction.

6. The elevation of the professional schools by requiring of candidates for degrees a good general education as a prerequisite for admission, while not insisting upon the impossible condition that all shall have gone over the whole of the old college course.

7. The elevation in particular of the Colleges of Agriculture and Mechanic Arts to equal rank and standing with other university courses, and the separation of the studies and exercises properly belonging to them, from the elementary branches taught in the primary and secondary schools; which branches it is not the business of COLLEGES to teach.

8. Great freedom in the arrangement of details to suit varying conditions, the main plan remaining unchanged.

To put the above plan of organization into effect, as well as to prescribe the rights, powers and duties of the various parties concerned, the Board of Regents have from time to time enacted such by-laws as seemed to be necessary. These, after being submitted to the General Faculty for their revision, have been arranged and codified for convenience of reference. See Calendars for 1874-5, and 1876-7, Appendix.

INSTRUCTION.

GENERAL REGULATIONS.

1. The University is open free of all charges for instruction, upon equal terms to all persons over fourteen years of age, whether residents of the State or not, who may pass the required scholastic tests and examinations, except such as may be excluded by the following resolution of the Board of Regents, adopted May 10th, 1876:

“Resolved, That in order to encourage preparatory work in the high schools and academies of the State, and co-operation by them with the University, no applicant shall be admitted to the Collegiate Department, to pursue the studies of any regular class or course, who is entitled to receive and can actually receive the same instruction, in substance, in the public schools of the school district in which he legally resides.”

2. The requirements for admission to the Collegiate Department, which is the usual avenue to the advanced courses and colleges, are stated under the head of that department.

3. Applicants for admission to the advanced or university courses proper, as candidates for degrees, are examined in a the studies of the appropriate courses of the Collegiate Department.

4. The Faculties occasionally exercise the power of waiving

the ordinary examinations in the cases of applicants of advanced age who desire instruction in special studies. These applicants must, however, submit to such tests as may be necessary to enable the professors concerned to decide whether they are competent to receive the desired instruction. There is no "special course" of study which applicants may choose upon their own motion. Students are only allowed to *select their studies*, when in the judgment of the faculty concerned there is special reason for their so doing.

5. The University year, beginning on the Tuesday next before the 15th day of September, embraces thirty-eight weeks exclusive of recesses, and is divided into three terms. The first term has thirteen weeks; the second twelve, and the third thirteen weeks.

6. As a general rule each student, in whatever department, has three recitations or lectures a day for five days in the week, besides rhetorical, military and other exercises.

7. The schedules are arranged according to the wants of the regular students. Special students must select (in equivalent amounts) from the studies as thus laid down.

8. Students of any department or college may elect studies of another department, under the direction of the faculties and professors.

9. Elective studies, to count on standing, must, as a general rule, be chosen from corresponding years and terms.

10. Except as otherwise ordered by the Board of Regents, the recitations and exercises of the various colleges or departments are conducted according to consolidated programmes adopted from time to time by the General Faculty.

11. Students in different courses are united in recitations whenever convenient.

12. The merit of students, as regards scholarship, is determined, in the Collegiate Department, by means of recitations and examinations; in the Colleges of the University by means of examinations only. The examinations* are habitually conducted in writing.

COURSES OF STUDY AND DEGREES.

ACADEMICAL.

I. The COLLEGIATE DEPARTMENT offers three courses of study, called Classical, Scientific, and Modern. The Classical Course has for its leading studies the Greek and Latin languages. The Scientific Course is characterized by a succession of elementary natural sciences. The Modern Course is distinguished by the prominence given to the modern languages. Students choose their courses at time of entrance, and do not change them except as allowed by vote of the General Faculty.

At the close of his course in this department each student has his option whether to enter at once, with a fair preparation, one of the professional colleges, or to proceed with higher academical studies in the College of Science, Literature and the Arts.

No degrees are offered in this Collegiate Department.

II. The COLLEGE OF SCIENCE, LITERATURE AND THE ARTS presents likewise three courses of study:

*The examination questions being commonly written on the blackboard after the assembling of the classes, cannot be furnished to applicants.

1. A COURSE IN ARTS;
2. A COURSE IN SCIENCE;
3. A COURSE IN LITERATURE.

These lead, respectively, to the degrees of BACHELOR OF ARTS, BACHELOR OF SCIENCE, BACHELOR OF LITERATURE.

MASTERS' degrees in Science, Literature and Arts are conferred on all bachelors of this or of any reputable college or university who, not sooner than two years after graduation, pass an examination on some prescribed line of classical, scientific or literary studies, and present a satisfactory thesis.

The following regulations are now in force.

Candidates are required to present their applications on the proper blank, stating the particular degree desired, and the several subjects selected by them on which to be examined. After the approval of the applications by the Faculty of the College, no changes nor departures can be permitted. Graduates of other colleges or universities will exhibit their diplomas on filing their applications.

REQUISITES FOR THE MASTER'S DEGREES.

MASTER OF ARTS.

1. A satisfactory examination,
 - (a) upon two classical authors, [Latin and Greek];
 - (b) upon any three distinct subjects selected from the following branches:

1. Mathematics, pure or applied.	5. History.
2. Science, natural or physical.	6. Modern Languages (English included).
3. Philosophy.	7. Philology.
4. Social Science.	
2. A thesis on a classical subject.

MASTER OF SCIENCE.

1. A satisfactory examination,
 - (a) upon two distinct branches of natural or physical science;
 - (b) upon any three distinct subjects selected from the following branches:

1. Mathematics, pure or applied.
2. Science (theoretical).
3. Philosophy.
4. Social Science.
2. A thesis on a scientific subject.
5. History.
6. A language, ancient or modern.
7. Philology.

MASTER OF LITERATURE.

1. A satisfactory examination,
 - (a) upon two modern authors, [North or South European Languages.]
 - (b) upon any three distinct subjects selected from the following branches:
 1. Mathematics, pure or applied.
 2. Science, natural or physical.
 3. Philosophy.
 4. Social Science.
 5. History.
 6. A language, ancient or modern.
 7. Philology.
2. A thesis on a literary subject.

PROFESSIONAL.

I. The COLLEGE OF AGRICULTURE offers an advanced or university Course, based on the Scientific Course of the Collegiate Department, leading to the degree of BACHELOR OF AGRICULTURE. For other courses in agriculture, see College of Agriculture, *infra*.

II. The COLLEGE OF MECHANIC ARTS offers three advanced or university courses, based on the Scientific Course of the Collegiate Department, which lead to appropriate Baccalaureate degrees:

1. A COURSE IN CIVIL ENGINEERING;
2. A COURSE IN MECHANICAL ENGINEERING;
3. A COURSE IN ARCHITECTURE.

The degrees of CIVIL ENGINEER, MECHANICAL ENGINEER and ARCHITECT, will be conferred upon Bachelors of Civil Engineering, Mechanical Engineering and Architecture, respectively, of this or of any reputable college or university, who shall, upon examination, to be held not sooner than two years after attain-

ing a first degree. show special proficiency in some branch of professional study, and shall present a satisfactory thesis.

The following regulations are now in force:

Candidates are required to present their applications on the proper blank, stating the particular degree desired, and the several subjects selected by them on which to be examined. After the approval of the applications by the Faculty of the College no changes nor departures can be permitted. Graduates of other colleges or universities will exhibit their diplomas on filing their applications.

REQUISITES FOR THE SECOND DEGREE.

CIVIL ENGINEER.

1. A satisfactory examination, (a) upon some subject in Civil Engineering; (b) upon any three distinct subjects selected from the following branches: 1. Mathematics, pure or applied; 2. Science, natural or physical; 3. Philosophy; 4. Social Science; 5. History; 6. A language, ancient or modern; 7. Philology.
2. A design of some structure in Civil Engineering.
3. A thesis on a subject in Civil Engineering.

MECHANICAL ENGINEER.

1. A satisfactory examination (a) upon a subject in Mechanical Engineering; (b) upon any three distinct subjects selected from the following branches: 1. Mathematics, pure or applied; 2. Science, natural or physical; 3. Philosophy; 4. Social Science; 5. History; 6. a language, ancient or modern; 7. Philology.
2. A design in Mechanical Engineering.
3. A thesis on a subject in Mechanical Engineering.

ARCHITECT.

1. A satisfactory examination (a) upon a subject in Architecture; (b) upon any three distinct subjects selected from the following branches:

1. Mathematics, pure or applied; 2. Science, natural or physical; 3. Philosophy; 4. Social Science; 5. History; 6. a language, ancient or modern; 7. Philology.
2. A design in Architecture.
3. A thesis on a subject in Architecture.

No honorary degrees are conferred by this University.

The detailed schedules of the courses of study in the various Colleges or Departments, will be found under the appropriate titles.

PROFESSORSHIPS.

The following is the scheme of DEPARTMENTS OF INSTRUCTION at large, for the various colleges or departments of the University, authorized by the Board of Regents:

I. ACADEMIC OR GENERAL.	<i>Associated Subjects.</i>
1. Mathematics.	
2. Astronomy.	
3. Chemistry.	
4. Physics.	
5. Geology and Mineralogy.	
6. Botany.	
7. Zoology.	Anatomy and Physiology.
8. English Language and Literature.	Rhetoric, Logic, Anglo-Saxon.
9. Latin Language and Literature.	Roman History and Antiquities.
10. Greek Language and Literature.	Greek History and Antiquities.
11. Comparative Philology.	
12. Mental Philosophy.	History of Philosophy.
13. Moral Philosophy.	
14. History.	History of Civilization. Philosophy of History.
15. Social Science.	Civil Government. International Law.
16. Elocution and Vocal Culture.	Music; Gymnastics.

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|---|---------------------------------|
| 17. Public Health. | Hygiene. |
| 18. Industrial Drawing. | Descriptive Geometry. |
| 19. Fine Arts. | Æsthetics. |
| II. PROFESSIONAL. <i>Associated Subjects.</i> | |
| 20. Theory and Practice of Agriculture. | Horticulture and Arboriculture. |
| 21. Civil Engineering. | Architecture. |
| 22. Mechanical Engineering. | Mechanics. |
| 23. Military Science. | |
| 24. Veterinary Science. | Stock Breeding. |
| 25. Education. | |
| 26. Business. | |

The following consolidations and assignments are now in force :

1. Astronomy is attached to the department of Mathematics.
2. Physics is attached to the departments of Chemistry and Engineering.
3. Botany and Zoology are in charge of the Professor of Geology and Mineralogy.
4. Logic is attached to the department of Social Science.
5. The French Language and Literature are in charge of the Professor of Modern Languages.
6. No instruction is offered in South European Languages.
7. Comparative Philology is attached to the department of Mental Philosophy.
8. International Law is assigned to the Professor of History.
9. Elocution and Vocal Culture are in charge of the Professor of English.
10. No instruction is offered in Music and Gymnastics.
11. The department of Public Health is in charge of the Secretary of the State Board of Health.
12. Industrial Drawing and Descriptive Geometry are attached to the chair of Civil Engineering.

13. No instruction is offered in the department of Fine Arts, except a short course of lectures.
14. Mechanical Engineering is united with Civil Engineering.
15. Veterinary Science and Stock Breeding are in charge of the professor of Theory and Practice of Agriculture.
16. No instruction is offered in the departments of Business or Education.

I. MATHEMATICS.

PROFESSOR THOMPSON.

The course in Pure Mathematics commences on a basis of Common Arithmetic, the Algebra of simple equations, and Plane Geometry, and assigns 120 exercises to the completion of Algebra; 30 exercises to Solid and Spherical Geometry; 60 exercises to Plane and Spherical Trigonometry; 40 exercises to Analytical Geometry; 120 exercises to Differential and Integral Calculus, and 60 exercises to Modern Geometry, Higher Equations and General Review.

The entering examinations contemplate a thorough knowledge of the fundamental operations in Arithmetic; Factoring, Common and Decimal Fractions, Compound Numbers, Percentage, (including Exchange and Banking), Proportion, Square and Cube Root, with their applications; in Elementary Algebra, candidates will be examined in Notation and Numeration of Algebra, Algebraic Addition, Subtraction, Multiplication and Division, Factoring, Fractions, Simple Equations, Radicals and Quadratic Equations; Elementary Astronomy and Plane Geometry. Examinations for advanced standing include, in addition to the above, all the studies passed over by the lower classes.

A prominent feature of the plan adopted in this department is limitation for the sake of thoroughness. It is the design to select only the cardinal principles of a given branch; concentrate attention on these, and treat all else as incidental. The results of this method are very satisfactory. An important principle once clearly understood by an entire class, the application of it and the problems involving it are often made a matter of recreation. In Algebra, for instance, the problems and equations are regarded as no part of the treatise, other problems and equations being substituted for them.

In Geometry, the principal object desired is to understand thoroughly the logical chain that connects about three hundred geometrical propositions into one argument and one line of unbroken demonstration. Practical application of geometrical principles is fully illustrated by numerous examples.

Trigonometry is taught less by formulas than concrete examples in Mensuration, Surveying, Navigation, and problems of the celestial sphere. All the Conic Sections are discussed, and ample time is afforded to General Geometry, with a full use of Differential and Integral Calculus.

As a preparation for Astronomy, the Classical and Modern students of the First Class are taught Mechanics twice per week in the second term.

II. ASTRONOMY.

PROFESSOR THOMPSON.

A brief course of lectures, on topics of descriptive Astronomy, is given by the Professor to the Sophomore class. The text-book used is Olmsted's College Astronomy, and the instruction is conducted strictly on a mathematical basis. These students are expected to become familiar with the simple problems of the sphere involving Spherical Trigonometry, with the use of formulas, and with computations necessary for the calculation of a lunar eclipse.

Those students who elect Astronomy in the senior year are expected to compute latitude and longitude, and go through the calculations of a solar eclipse in the most rigorous method. This class is instructed in the practical use of the telescope.

The department is furnished with a limited supply of astronomical apparatus, for experiment and illustration.

III. CHEMISTRY.

PROFESSOR PECKHAM.

During the first term, all students of the Second Class in the COLLEGIATE DEPARTMENT take General Chemistry. The third term, the scientific students of the same class are required to take Applied Chemistry; also the students in the Modern Course, if they so elect.

Scientific students of the First Class take Analytical Chemistry three times per week the second term, and twice per week the third term. Classical and Modern students electing this subject take it five times per week during either the Junior or Senior years, or students in the Modern Course can elect this subject for the first term Junior year only.

The chemical laboratory is fitted up in the best manner, with apparatus and fixtures of the most approved construction. It is designed to furnish instructions in qualitative analysis to all students in the Scientific Course of the Collegiate Department, and in quantitative analysis and special research to all students of whatever department or college, who may desire or be entitled to such opportunities.

No charges are made for instruction, and only such charges for apparatus and chemicals as will cover actual cost to the institution. The charges for ordinary chemicals and apparatus will not exceed ten dollars per term. All glass-ware and other apparatus are charged to the student at cost. The glass-ware that is uninjured is received back at cost; other articles are received back under special regulations, generally at a discount of twenty per cent. The cost of apparatus will vary from two to five dollars per term, according to the care exercised by the student. To cover these expenses, students in Analytical Chemistry are required to deposit, during the first week of each term, with the Professor of Chemistry, the sum of ten dollars, the balance of which, after deducting the charges mentioned, is delivered to the student at the end of the term.

The following statements are made to assist students in selecting their studies with reference to their laboratory work:

Classical students desiring to prepare for the study of medicine are advised to arrange for taking Analytical Chemistry in the Senior year.

Modern students desiring to prepare for the study of medicine are advised to select Analytical Chemistry in the Junior year.

Scientific students desiring to prepare for the study of medicine are advised to take the Scientific Course with Latin, electing French in the first class Collegiate Department, German in the Junior year, and Analytical Chemis-

try in the Senior year. If they prefer a course without Latin, they are advised to take French in the first class, Analytical Chemistry in the Junior year, and French in the Senior year.

Students desiring an extended course in Chemistry are advised to take the Scientific Course with German, French in the first class Collegiate Department, electing Analytical Chemistry in either or both the Junior and Senior years.

A special course may be arranged for students preparing for medicine, consisting of one term of qualitative analysis, followed by a thorough course in Toxicology and the elements of physiological Chemistry, and the preparation of vegetable and animal pharmaceutical products.

A large collection of specimen drugs, for illustrating this branch of study has been donated by Noyes Bros. & Cutler, wholesale druggists, St. Paul.

The University has also an extensive collection of iron ores and slags, to which additions are constantly being made, for the use of students in the course in Mechanical Engineering. Special instruction is given such students in the analysis of iron ores, iron and steel.

The necessary apparatus for the study of Assaying, as well as the latest works on that subject are supplied to the Laboratory.

Students desiring to pursue Assaying, or any other special branch of Analytical Chemistry, are received in the Laboratory as "special students" of the University, on application to the appropriate Faculty.

IV. PHYSICS.

ASSISTANT PROFESSOR PECK.

The course of study offers to scientific students a full course in Physics and Mechanics, running through three terms, one of which is in the third, second and first classes, respectively. To classical and modern students, the course offers one term in the second class. With these students Molecular Physics is treated as thoroughly as is possible in the short time devoted to the subject. These students also have, in the first class, two hours a week in Mechanics, under Prof. Thompson, to especially prepare them for the study

of Astronomy. In addition to this work, which is required, students may elect to pursue an advanced course of study in the Physical Laboratory, making their own experiments and constructing their own apparatus in a shop provided with tools for that purpose.

V. GEOLOGY AND MINERALOGY.

PROFESSOR HALL.

The third class in the Collegiate Department spends the winter term on General and Dynamical Geology. Part I and Part IV of Dana's Manual of Geology are completed, with as much other work as the time will allow.

The Junior class takes up Mineralogy and Lithology in the winter term, giving two hours per day to this study; one hour in the lecture room and one hour in the laboratory. The aim of the term's work is to give the student a knowledge of the principles of Crystallography, and to make him familiar with the physical character and composition of the common minerals and rocks. As an aid in attaining these results, the laboratory work is important. This consists in a study of the crystalline forms, aided by a collection of models, and a course in Qualitative Blowpipe Analysis.

The same class continues the study of Historical Geology during the following term. The aim here is to bring out the succession of principal events in the geological history of the earth, in a series of recitations and lectures. Special attention is given to the Geology of Minnesota.

The student of the science of geology, in the University, is furnished throughout with such aid as can come from a good supply of maps, models, specimens, and a Macey's Sclipticon with a suite of geological and mineralogical slides. The collections of the Geological and Natural History Survey of the State, stored by law in the University museum, are in constant use in the class-room. An excellent cabinet of minerals and rocks in the museum, and a good laboratory collection, are amply sufficient for all needs. A series of Prof. Ward's casts of fossils is in constant use in the study of Historical Geology. Text and reference books; Manual of Geology, Dana; Elements of Geology, LeConte; Text-book of Mineralogy, E. S. Dana; Determinative Mineralogy and Blowpipe, Brush.

VI. BOTANY.

PROFESSOR HALL.

The third class in the Collegiate Department begins Botany in the spring term. The elements of Structural and Systematic Botany are acquired by the use of a text-book and hand specimens. Each member of the class is required to analyze correctly and name fifty species, preserving them in the form of an herbarium. At the final examination, each student submits his herbarium and note-book, and must be prepared to name and characterize each species, and name its family relations.

In the College of Agriculture, provision is made for a special course in Botany, with reference to the wants of students expecting to pursue farming.

VII. ZOOLOGY.

PROFESSOR HALL.

Students in the Collegiate Department are required, when in the First Class, to pursue the study of Zoology during the Spring term. The course consists of a review of the elements of Zoology with the use of microscope and sciopticon, and illustrations from the Museum.

*VIII. ENGLISH LANGUAGE AND LITERATURE.**

PROFESSOR MARSTON.

THIRD CLASS.—Students who elect English study Higher English Grammar, with practice in the analysis and critical reading of standard English writings.

SECOND CLASS.—Those electing English study Historical English Grammar, the history of the English Language, with critical readings and practice in the use of words and idioms.

FIRST CLASS.—All are required to take Rhetoric the second term.

In the first and second terms Early English (Anglo-Saxon) is required of the students in the Modern Course, and is optional with those in the other courses; and in the third term, Early English is read by those in the Scientific Course electing English.

*To this department is assigned, for the present, the instruction in Writing and Speaking.

The rhetorical work in the Collegiate Department is given in accordance with the following scheme:

	FIRST TERM.	SECOND TERM.	THIRD TERM.
III. CLASS	Vocal Culture. <i>Saturday Afternoons.</i>	Essays with Geology.	
II. CLASS	Essays with Chemistry.	Declamations. <i>Saturday Afternoons.</i>	
I. CLASS	Essays with Logic.	Essays with Rhetoric	Declamations. <i>Saturday Afternoons.</i>

UNIVERSITY CLASSES.

JUNIORS (of all departments).—The History and Principles of Development of English Literature; the Critical Study of the English of Chaucer and Shakespeare; Lectures.

Essays and original orations (six in all during the year) are required of each member of the class. Each essay or oration is carefully criticised, then re-written; then, if approved, rehearsed, and finally presented before the students and faculty.

SENIORS.—In the first term, students of the Modern Course, and those in other courses who elect English, continue the study of English Literature, giving special attention to British and American orators.

In the third term, lectures upon the Philosophy of Literature and Criticism, on Lyric, Epic and Dramatic Poetry; readings and criticisms.

Essays and orations before the University—five exercises in the year, including Commencement part.

IX. NORTH EUROPEAN LANGUAGES.

PROFESSOR MOORE.

GERMAN.

GERMAN is required of all students of the Modern Course. Those of the Scientific Course are free to commence it at the beginning of the third class, discontinuing the English or Latin previously pursued, subject to the action of the General Faculty. Students of the Classical Course may take the German Grammar in the Junior year with the third class.

The course is as follows:

*University of Minnesota.**First year (Third class).*

- 1st Term, Ahn-Henn's Rudiments of German and Whitney's Grammar.
 2d Term, Rudiments continued, and Whitney's Grammar and Reader.
 3d Term, Rudiments continued, and Whitney's Grammar and Reader
 completed.

Second year (Second class).

- 1st Term, Lessing's Minna von Barnhelm; translations into German.
 2d Term, Schiller's Wilhelm Tell; History of Germany.
 3d Term, Goethe's Egmont; History completed.

Third year (Junior class).

- 1st Term, Goethe's Faust, first part.
 2d Term, Lessing's Laocoon, or Goethe's Prosa.
 3d Term, Deutsche Lyrik, and History of German Literature; *Lectures.*

The objects aimed at in the above course of study are: (1) in the earlier stages, by means of oral and written exercises, to teach the student how to express himself with some degree of facility in German, on topics of every day life; (2) a systematic study of Grammar; (3) a critical reading of some of the masterpieces of German literature, with collateral instruction and research in geography, history, mythology, biography of the authors, etc.

So far as possible, the same "classical" discipline and culture commonly accredited to the ancient languages will be imparted.

SCANDINAVIAN LANGUAGES.

SWEDISH AND NORWEGIAN-DANISH are offered as an alternative to all students of the Senior Class. They will be studied chiefly through the medium of the German. The text-books are:

Swedish.

- 1st Term, Schmidt's Schwedische Sprachlehre.
 2d Term, Prose Selections.
 3d Term, Tegner's Frithjof's Saga.

Norwegian-Danish.

- 1st Term, Heckscher's Dænische Grammatik.
 2d and 3d Terms, Selections in prose and verse

X. FRENCH LANGUAGE AND LITERATURE.

PROFESSOR LAING.

COLLEGIATE DEPARTMENT.

In the First Class, French is required of all students in the Modern Course, and is optional to the students of the Classical and Scientific Courses.

1st Term—French Principia, Part I. completed; Part II. begun.

2d Term—French Principia, Part II. completed; Souvestre's "Un Philosophe sous les Toits;" Keetel's French Grammar begun.

3d Term—French Grammar completed; Erckman-Chatrain's "Conscrip-t de 1813," or "Waterloo," or De Vigny's "Cinq-Mars;" Trans-lations from English to French; French Composition.

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French is required of students of the Modern Course the first and second terms of the Senior Year; optional to students of the Classical and Scientific Courses for the same terms, and optional to all students the third term.

1st Term—History of Early French Literature, and readings therewith; Brachet's "Historical French Grammar."

2d Term—History of Mediæval French Literature; The French Theatre.

3d Term—History of Recent French Literature, and readings therewith.

XI. LATIN LANGUAGE AND LITERATURE.

The requirements for admission to the Freshman Class are:

1. Latin Grammar, Harkness' Revised Edition, or Allen & Greenough's.

Jones' First Lessons in Latin are recommended for beginners. The entrance examinations of the past two years have shown a marked deficiency in a knowledge of elementary principles, both in inflections and prosody, and in the application of the rules of syntax. By following the order of these lessons and *learning* them, it is believed that a much better knowledge of the elementary principles will be attained.

2. PROSE COMPOSITIONS.—Thirty lessons of Jones' Lessons, i. e., 62d to 92d, or equivalent.

3. READING.—Three books of Cæsar's Commentaries, with Syntax; four

orations of Cicero, with Syntax; and four books of Virgil, with special reference to Syntax, Prosody and Mythology.

After the college year 1879-80, a general outline of Roman History to the time of Augustus may be required.

The Freshman Latin is Livy, Syntax thoroughly reviewed, Latin Prose Composition, Roman History and Antiquities.

The Sophomores read Horace, Odes, Satires, and *Ars Poetica*, Quintilian or Tacitus.

The Juniors read Oratory, Philosophy, Lectures.

The Seniors read Pliny on Sculpture, Painting and Toreutic Art. A normal class, for those intending to teach, will be formed each Spring term.

The Roman Pronunciation of Latin has been adopted:

VOWELS.

LONG VOWELS.

a—as in father.
e—“ “ they.
i—“ “ machine.
o—“ “ go.
u—“ “ oo in too.
y—“ i

SHORT VOWELS.

a—as in amend.
e—“ “ met.
i—“ “ pity.
o—“ “ police.
u—“ “ pull.
y—“ i

DIPHTHONGS.

ae as in *ay*; *au* as in *ow*; *oe* as *oi* in *oil*; *eu* nearly like *u* in *use*; *ei* as in *rein*; *u* in *ua*, *ue*, *ui*, etc., like *w*.

CONSONANTS.

c always as in *can*; *ch* always as *k*; *g* always as in *gun*; *j* always as *y* in *young*; *s* always as in *sin*; *t* always as in *tin*; *v* like *English w* or like *ou* in *oui*.

The other consonants are sounded as in English.

The full course in Latin, is offered to scientific students, and such students can take French when Seniors, if they desire to do so.

Modern students take Latin until the end of the Freshman year, and may take the full Latin course by a little additional work.

Students not fully prepared to take the examination in Latin for admission to the Freshman Class may take that for the Sub-Freshman Class.

XII. GREEK.

PROFESSOR BROOKS.

Scientific students may take Greek in place of Latin.

The course of study embraces text-books in History, Poetry, Oratory, Comedy, Tragedy, Philosophy, Lectures on the Greek Language, Literature, Religion, Philosophy and Art. Collateral studies are History, Geography, Mythology, Biography, Customs, &c.

PRONUNCIATION.—Greek is pronounced according to the accents, and with the so-called Continental sounds of the vowels and diphthongs.

PRINCIPLES AND METHODS.—In translation, the radical meaning of words is to be learned, but the precise signification in the passage rendered is to be given; the thing to be done in translating an author is to give his exact meaning in the best idiomatic, grammatical English; facts, illusions, tropes, history, chronology, mythology, topography, customs, arts, laws, grammatical forms and elements, etymologies, composition of words are to be attended to. Translation of English into Greek is based upon the author read. So far as the author himself is concerned, among the things to be noted are, the chief facts of the author's life; the contemporary history and political condition of the country, and the author's relation to them; the character of the people; and the expression and logical scope of his thought; and the wisdom, &c., of his views.

XIII. MENTAL PHILOSOPHY.

PROFESSOR CAMPBELL.

Instruction in this department begins with Psychology the third term of the Junior year. The exercises occur five times each week, one-half of the hour being occupied with a text-book recitation, and the other with a lecture on the topic in hand. The subject is investigated empirically. It is introduced by the study of Anthropology, in which the relations of the mind to the body are examined.

Following the discussion of the structure of the mind come lectures on the content of the mind, the first term of the Senior year. This subject is treated historically, and is, strictly speaking, the study of Philosophy proper. There are twenty lectures on the History of Philosophy, ten on Outology,

and ten on Rational Psychology or the Philosophy of the Mind, one-third of the time being devoted to essays, recitations and reviews.

The two terms of full work given to Mental Philosophy cover the following subjects: Anthropology, Empirical Psychology, History of Philosophy, Ontology, or Philosophy proper, and Rational Psychology, or Mental Philosophy proper.

XIV. MORAL PHILOSOPHY.

PROFESSOR CAMPBELL.

Ten lectures on Practical Ethics are given before the Freshman class during the second term.

In the second term of the Senior year, the twelve lectures on the History of Philosophy are strictly speaking, the History of Ethics. They are followed by fifteen lectures on theoretical Ethics or Moral Philosophy proper, which are succeeded by six lectures on the Evidences of Revealed Religion, or comparative mythology. During the term the class engages in five discussions of such living questions as are involved in temperance legislation, the state and the schools, etc. One third of the term is devoted to essays, recitation and reviews.

The third term Senior, a course of semi-weekly lectures is given on Natural Theology. In these the History of Philosophy is brought down to the present time, being the History, specially, of Natural Theology. The prevalent speculative questions of science and philosophy touching the existence of a Divine Being, are discussed. The Department of Moral Philosophy includes the following subjects: Practical Ethics, History of Moral Philosophy, Theoretical Ethics, or Moral Philosophy proper, Evidences of Revealed Religion and Natural Theology.

XV. COMPARATIVE PHILOLOGY.

PROFESSOR CAMPBELL.

Properly speaking, the instruction in Comparative Philology is reserved for the postgraduate course. As introductory to such instruction, a course of twenty lectures on Philology (theoretical), commonly called the Science of Language, is given during the first term of the Junior year. These lectures

cover the following general subjects: The Philosophy of Grammar; Language as spoken and heard; Language as written and seen; the Laws of Inflection; the Roots; History of Philology; the Literature of Philology.

XVI. FINE ARTS.

PROFESSOR CAMPBELL.

A course of ten lectures on the Fine Arts is offered to the Seniors the third term. The course embraces a discussion of the Philosophy of Art, the theory and subdivision of the Fine Arts, and a historical and critical examination of Architecture, Sculpture, Painting and Music.

XVII HISTORY.

PROFESSOR LAING.

COLLEGIATE DEPARTMENT.

Applicants for admission to the Fourth Class are examined in the History of the United States. A thorough knowledge of so much of the subject as is contained in Swinton's Condensed History of the United States, is required.

The following is the scheme of historical studies :

FOURTH CLASS—General History, the third term, five times a week, with essays on historical subjects and occasional lectures.

SECOND CLASS—Mediæval History, the second term, twice a week,

FIRST CLASS—Modern History, the third term, twice a week.

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JUNIOR CLASS—History of Civilization, the first term, three times a week.

SENIOR CLASS—Option of recent History, consisting of a course of twelve lectures on the more important political events, and the social and scientific progress of the present century.

The Philosophy of History will be discussed in connection with the History of Civilization.

The subjects are open as electives to corresponding classes in the Colleges of Agriculture and Mechanic Arts.

Civil government is required in the Scientific and Modern courses of the

Senior year, four times a week through the second term. The principal chapters of De Tocqueville's Democracy in America are gone over, by way of introduction. The constitutions of the United States and of Minnesota are critically read and commented upon, and the leading titles of legislation discussed. City, village and township organization and administration are briefly treated. This subject is taught by the President.

XVIII. SOCIAL SCIENCE.

MR. FOLWELL.

Political Economy and National Economy are taught to the Seniors in the Third Term chiefly by conversational lectures. These subjects are required of all students of the College of Science, Literature and the Arts, and are elective for those of other colleges. The library is well supplied with standard authors on Political and Social Science. The aim of the instructor is to present clearly and fairly the history of the science, and to thoroughly inculcate established principles. On disputed topics the conflicting views are brought out with all possible impartiality.

In International Law a course of twelve lectures is given by the professor of History (Dr. Laing) to Seniors electing the subject in the spring term.

The subject of Logic, assigned to this department, is required of all the members of the First Class Collegiate Department in the first term. The course is necessarily confined mainly to the elementary and theoretical topics, but an effort is made to impart some knowledge of the later developments and applications of the science.

XIX. *ELOCUTION.* See "English Language," &c., *supra*.

XX. PUBLIC HEALTH.

PROFESSOR HEWITT.

A course of lectures on Sanitary Science is offered to the Seniors of all Departments the Third Term. The topics embraced are such as: Personal Hygiene, as depending on soils, water, food, clothing, habits, etc.; Public Hygiene, including sewerage and drainage of towns; heating, lighting and ventilation of dwellings and public buildings; epidemic diseases, intemperance, etc.

By authority of the Board of Regents, Professor Hewitt carries on a system of physical examinations designed to collect and preserve the health history of each student during his connection with the University.

XXII. INDUSTRIAL DRAWING.

PROFESSOR RHAME.

Drawing and Descriptive Geometry are required of the Scientific students of the COLLEGIATE DEPARTMENT, are optional for the Modern students during the entire course, and for the Classical students during the first two years.

THE COURSE IS AS FOLLOWS :

Fourth Class.—Smith's Free Hand Drawing is taught during the third term. This work is in the line of the Geometrical and Mechanical Drawing pursued by the higher classes.

Third Class.—During the first term the students learn the use of instruments, the principles of Geometrical Drawing, Tinting and Shading, and Elementary Projections.

Second Class.—Projection Drawing is continued a part of the second term. The instruction is given by means of models, each student making the necessary measurements. Church's Descriptive Geometry is then taken up. A thorough drill is given in this subject. First, the class is required to draw the problems on the blackboard, and explain them; afterwards each student draws the problems more carefully on paper.

First Class.—Descriptive Geometry is continued and applied to many practical problems and to Perspective. Besides the problems in Perspective in the text, the students make original drawings of various objects. All the drawings except the Free Hand Drawings, must be neatly executed with India Ink on Whatman's drawing paper. The "Imperial" size drawing paper is recommended. Each sheet should be divided into four equal parts,

trimmed to a uniform size of about ten inches by fourteen inches, and bound in some simple manner.

INSTRUMENTS AND MATERIALS REQUIRED.

It is desirable, for beginners, to secure only a small number of instruments, but these should be of good quality; if more are at any time desired, they can be purchased separately. German silver instruments are the best.

The following outfit is recommended for beginners :

One pair of Plain Dividers—One pair of Dividers with Pen and Pencil Point—One right (the Pen)—A Scale—A pair of Triangles—A hard Pencil—Rubber—A piece of India Ink.

These articles of good quality need not cost over \$4.

XXI. MILITARY SCIENCE.

PROFESSOR LUNDEEN.

"SEC. 26. *And be it further enacted,* That for the purpose of promoting knowledge of military science among the young men of the United States, the President may, upon the application of an established college or university within the United States, with sufficient capacity to educate at one time not less than one hundred and fifty male students, detail an officer of the army to act as president, superintendent or professor of such college or university, that the number of officers so detailed shall not exceed twenty at any time, and shall be apportioned through the United States, as nearly as practicable according to population, and shall be governed by general rules, to be prescribed from time to time by the President."

In compliance with the foregoing section of an act of Congress, approved July 28th, 1866, the President has detailed an officer of the army as Professor of Military Science at this University. The government has also furnished 150 light breech-loading rifle muskets, with accoutrements complete, similar to those in use by cadets at the U. S. Military Academy, and a section of artillery, with equipments, for instruction in the school of the piece and battery. Instruction is given in the schools of the soldier, company and battalion; drill, parade, review and other ceremonies.

By action of the Board of Regents, military exercises are required of all male students of the Collegiate Department, and are optional in the other classes. The course of theoretical instruction is optional.

The military exercises will comprise, besides parades, reviews, &c., instruction in the following subjects :

Practical Instruction.

1st Term—School of the Soldier, Manual of Arms, School of the Company, Target Practice and Artillery Drill.

2d Term—Manual of Arms (for new students), Bayonet and Foil exercise, (optional), and duties of Officers and Non-Commissioned Officers.

3d Term—Schools of the Company and Battalion, and Skirmish Drill.

Theoretical Instruction.

1st Term—Military Engineering.

2d Term—Military History, Strategy and Grand Tactics.

3d Term—Military Law.

The work in the department is apportioned to the different classes as follows; and students not passing in the military exercises of their classes will be conditioned the same as in any required study :

4th Class : School of the Soldier, Manual of Arms, and Company Drill; *i. e.*, the duties of a private in ranks.

3d Class : Artillery Drill—manual of piece, and the principal movements in the school of the soldier dismounted.

2d Class : Instruction in the duties of non-commissioned officers.

1st Class : Instruction in the duties of officers.

For Battalion Drill, all classes are, of course, united.

XXII CIVIL ENGINEERING, MECHANICAL ENGINEERING, ARCHITECTURE.

SEE COLLEGE OF MECHANIC ARTS.

XXIII THEORY AND PRACTICE OF AGRICULTURE, VETERINARY SCIENCE, &c.

SEE COLLEGE OF AGRICULTURE.

EQUIPMENT.

GROUNDS.

The University is situated in city of Minneapolis, on the east side of the Mississippi river, about one mile below the Falls of St. Anthony, on an elevated bluff in full view of the same. The grounds are now about thirty-five acres in extent, undulating in surface and well wooded with native trees. The plans for the embellishment of the grounds, made by Messrs. Cleveland and French of Chicago, "landscape architects," will be carried out so fast as the means can be afforded. Meantime, such are the natural advantages of situation and contour, the grounds are very attractive.

The Experimental Farm of the Agricultural College is situated a short distance below, near the east bank of the Mississippi. For description see "College of Agriculture."

BUILDINGS.

The general plan of the buildings contemplates a central academic building, and, grouped around it, additional structures for the separate departments or colleges.

MAIN OR ACADEMIC BUILDING.

This building is 186 feet in length and 90 in breadth exclusive

of porches, having three stories above the basement. The walls are of blue limestone and the roof, tin. The rooms, fifty-three in number, as well as all the corridors, are heated by an efficient steam apparatus, and thoroughly ventilated. Water and gas are supplied wherever needed. The Assembly Hall, in the third story, 87x55 feet and 24 feet high, will seat with comfort 700 people, and 1200 can be accommodated.

THE AGRICULTURAL COLLEGE.

This is the first of the special buildings for the separate colleges. It is of brick on a basement of blue stone, 146x54 feet.

The central portion is two stories in height. The south wing, 46x25 feet, is a plant house of double sash and glass. The north wing contains the Chemical Laboratory. There are class rooms for Chemistry, Physics and Agriculture, and private laboratories for the professors. A large room in the second story is occupied by the museums of Technology and Agriculture.

LABORATORIES.

THE CHEMICAL LABORATORY occupies five rooms in the north wing of the Agricultural College. (1) The main students' laboratory, 22x45 feet. This contains eight tables, accommodating sixty-four workers, in two sections or reliefs. Each table has water, gas, sink, shelving for reagents, drawers and cupboards for apparatus—all of the most approved construction. Between the tables, in the outside walls, are ventilating hoods of an improved form, suggested by the Professor of Chemistry. (2) The quantitative laboratory adjoining, 22x30 feet. (3) The apparatus room, provided with cases for storing apparatus, and tables for the balances. (4) The professor's private laboratory, a small

room, but one well adapted to the purpose. (5) A room in the basement fitted up for assay and furnace work. All the rooms except the last are on one floor, are well lighted and ventilated, and communicate with each other in a convenient manner. The University is able to offer ample facilities for successful study and instruction in both general and analytical Chemistry, and in the allied branches of study. Persons desiring chemical analyses should address Prof. S. F. Peckham.

THE PHYSICAL LABORATORY.—In the Agricultural building the rooms devoted to the Department of Physics are so arranged and furnished that students desiring to make a specialty of Physics can have opportunity to use the apparatus, and perform their own experiments. In addition a small room has been set apart for a lathe and work-bench. Students are permitted and encouraged to construct models and apparatus. Excellent specimens have already been produced.

THE MINERALOGICAL LABORATORY.—Tables and apparatus sufficient for the use of twelve workers at a time, have been provided in room 49, main building. Additions will be made as required.

DRAWING ROOMS.

Room 45 in the main building, 47x30 feet, is furnished with stout wooden tables for the use of classes in Geometrical and Free Hand Drawing. There are also cases and cabinets for holding drawings and drawing boards. A considerable collection of prints, drawings and models for lessons and illustrations has been made.

Room 40 is provided with the Worcester Adjustable Drawing Tables of wood and iron for the use of the classes in Descriptive Geometry, Engineering and Architecture.

MUSEUMS.

The **GENERAL MUSEUM** comprises the collections of the Geological and Natural History Survey of the State, augmented by purchases and donations. The Zoological collection comprises specimens of some of the larger mammals of the Northwest, a set of casts of fossils purchased of Prof. H. A. Ward, of Rochester, N. Y., embracing representations of over 350 species and several hundred specimens of invertebrates. These are placed in suitable cases in room 51. The south room of the Museum (52) is devoted to mineralogical collections, which already number several thousands. Among these is a complete suite of the zinc and iron minerals and their associates, from Franklin and Ogdensburg, N. J., with many duplicates. The rooms are open daily during the University year for the use of students and visitors.

Contributions to the General Museum should be sent to Prof. N. H. Winchell, Curator.

The **MUSEUM OF AGRICULTURE** is designed to assist in illustrating the instruction in Agriculture and Horticulture. It is intended to contain models of agricultural implements, seeds of all kinds of grasses, grains and noxious weeds, in jars; grasses and grains in the straw; drawings and lithographs of machines and animals; fruits preserved in alcohol; fertilizers, and other articles of interest to the farmer. Already considerable progress has been made in collecting and arranging. Contributions may be sent to Prof. Chas. V. Lacy.

The **PLANT HOUSE** is similar in purpose to the Museum of Agriculture. It is designed to furnish (1) means for illustrating the subject of Botany, viz: specimens for analysis before the class, and living plants of botanic or economic interest, that

cannot be grown in the open air in Minnesota; (2) means for illustrating the subject of Horticulture, viz: the propagation of plants and the construction, heating and management of plant houses.

MUSEUM OF TECHNOLOGY.—A cabinet of specimens illustrating the products and processes of applied Chemistry, is being collected by the Professor of Chemistry, as opportunity offers. This collection will embrace fuels, ores, furnace products, textile materials, both raw and manufactured; dye-woods and other materials used in dyeing; specimens illustrating the bleaching and printing of cotton, linen and woolen goods; earthenware, pottery, etc. A good beginning has already been made, and it is hoped that large additions will be obtained during the coming year. Contributions are respectfully solicited, for which due credit will be given. Address Prof. S. F. Peckham.

The CLASSICAL MUSEUM, a beginning of which has been made, will comprise all *materia* that may illustrate Classical Geography, Topography, Chronology, Mythology, Geography, Archæology, and Art, such as plans of ancient cities, temples, battle-fields, camps, etc.; photographs of cities, famous places, ruins, statuary, architecture, etc.; busts, (original and plaster casts); coins, medals; specimens (original and plaster casts) of ancient sculpture, friezes, capitals, columns, etc.; of vases, etc.; books and plates of costumes, military weapons, armor, household and agricultural affairs, and naval illustrations, etc.; architectural illustrations, with models of the different orders of Architecture; ancient books and manuscripts; specimens of inscriptions, and implements used in writing, and in the arts. Additions will be made to the Museum constantly. Contributions may be sent to Prof. Jabez Brooks, D. D.

The collection of PATENT OFFICE MODELS, and the Schröder models for Descriptive Geometry, are stored in substantial cases in room 45, main building.

APPARATUS.

No attempt has been made at display, but great pains have been taken to procure for the various departments the essential instruments and materials for illustration. In addition to articles referred to in previous statements, may be mentioned: a transit, Y level, compass, chains and tape measures, and a full set of fine drawing instruments for the Department of Civil Engineering; a variety of geographical and maps, ancient and modern; globes, charts, geometrical models, stereopticons, etc.

THE LIBRARY.

The number of bound volumes has reached nearly 13,000, and additions are constantly being made. Besides the books purchased of booksellers, the following collections have been acquired:

(1) The Robertson Collection of 1,200 volumes, purchased from Col. D. A. Robertson, of St. Paul, formerly a professor in the University. This collection is rich in works on American History, Arctic Travel and Discovery, Ethnography and Political Economy.

(2) The Campbell Collection of 2,800 volumes, selected by Prof. Campbell in London, Berlin, Florence, and other cities of Europe. This embraces many French, German and Italian works. The subjects most numerously represented are Philosophy, Philosophy and Social Science, general Literature, History and Biography.

(3) The Tappan Collection, comprising 2,500 volumes from the private library of the Rev. H. P. Tappan, D. D., LL. D., former-president of the University of Michigan. This collection contains choice and valuable editions of standard English authors, numerous works on philosophical subjects, and many reviews and works of reference.

(4) The State Library Collection, being the miscellaneous books of that library turned over to the University by act of the Legislature of 1877.

The miscellaneous purchases have been confined to encyclopedias, dictionaries, biographical material, and works of first necessity for the various departments of instruction. Among the public documents are to be found sets of the Smithsonian publications, the Coast Survey Reports, the Survey of the Pacific Railroad, Schoolcraft's Indian Tribes, United States Geological Surveys, Patent Office Reports, &c.

The alphabetical lists of authors printed from year to year, serve a good purpose as a catalogue of authors, and furnish the titles for the printed card catalogue. The alphabetical catalogue of subjects has not yet been printed.

The Library and Reading Room occupy rooms 18, 20, 22, and 24 in the first story of the main building. The books are shelved according to a simple classification upon a so-called "elastic system," which allows additions indefinitely without disturbing the existing arrangement and numbering.

The Library is open to everybody, from seven to nine hours, every day of the University year except Sundays and holidays. Students are allowed to borrow books for home reading, to be kept seventeen days; but works marked in the catalogue with a *, comprising books of reference, illustrated works, and rare and costly books, cannot be removed. These works, as well as all others, may be read and consulted during the same hours, in the

READING ROOM,

where a number of periodicals are also to be found; among them the following:

QUARTERLIES.

Journal of Speculative Philosophy; Bibliotheca Sacra: Westminster Review; London Review; Edinburgh Review; British Review; Mind; Popular Science Review.

BI-MONTHLIES.

International Review; New Englander.

MONTHLIES.

North American Review, Blackwood's Magazine, American Agriculturist, Popular Science Monthly, and Supplement, National Live Stock Journal, Gardner's Monthly and Horticulturist, Art Journal, Library Journal, Appleton's Journal, Scribner's Magazine, Harpers' Magazine, Eclectic Magazine, Atlantic Monthly, Van Nostrand's Engineering Magazine, Contemporary Review, American Journal of Science and Arts, Annales de Chemie, Deutsche Revue.

SEMI-MONTHLIES.

Revue des Deux Mondes.

WEEKLIES.

Littell's Living Age, The Nation, Scientific American and Supplement, Harper's Weekly, London Times, Publishers' Weekly, Official Gazette of Patent Office, Athenæum, Academy, Chemical News, Nature, Boston Post, Country Gentleman, Minneapolis Freie Presse, Glencoe Register, Minnesota Staats Tidning, Anoka Sun and Republican, Prairie Farmer, &c.

SEMI-WEEKLIES.

New York Evening Post, New York Tribune.

DAILIES.

Minneapolis Evening Tribune, St. Paul Pioneer Press, War Department Weather Map, &c.

The rules and regulations of the Library, as prescribed by the Board of Regents, may be found in full on pp. 66-8 of the Calendar for 1876-7.

GENERAL INFORMATION.

ACCESS.

The University of Minnesota is accessible by means of all conveyances centering in the cities of Minneapolis and St. Paul.

The main entrance to the grounds is at the corner of Third Street (or University Avenue) and 14th Avenue Southeast. The eastern terminus of street railways is one block distant; fare 5 cents.

HOW TO ENTER THE UNIVERSITY.

- (1.) Apply personally or by mail to the president for a blank "application," and have it properly filled up, dated and signed.
- (2.) Previous to the hour appointed for examinations, present your application at the office, and receive a numbered examination ticket. By this number alone will you be known to the examining professors.
- (3.) Report promptly for examinations at the time and place announced, and attend the sessions punctually, observing such directions as may be given.
- (4.) At an appointed hour after the close of the examinations, the successful numbers will be announced.
- (5.) The successful applicants, having selected their courses of study, and paid the annual fee of five dollars for incidental expense, receive a registration card, which admits them to the classes.

BOARDING.

THE UNIVERSITY HAS NO DORMITORIES, except for a few employees. This is a matter both of necessity and policy: of necessity, because the State has not been able to furnish money to

build dormitories; of policy, because it is thought better for the students to be distributed among the people of the University city, amenable to the common laws and sentiments of society. The public bounty stops at furnishing free instruction, leaving to private hands the providing of maintenance.

Three methods of boarding are practiced:

1. Self boarding, by individuals, or, more commonly, by small groups or colonies composed of members of the same family, or of neighboring families. Rooms are hired and furniture, provision and fuel brought from home. When well managed, this is an excellent and very economical mode of living. Two dollars per week per pupil may be set down as the cost.

2. Club boarding. This has been practiced for several years, and is well organized. The price of board has never exceeded \$2.50 per week, and was not much above \$1.50 during the past year.

3. Boarding in families. The difficulties formerly encountered in procuring suitable places for students desiring to board in families, have disappeared. Good board can be found at reasonable prices, ranging from \$3.50 upwards. A list of families willing to receive student boarders, individually or in clubs, is posted on the bulletin board at the beginning of the year; also one of "rooms to let."

Persons desiring to secure boarding for young ladies are advised to correspond with Mrs. A. N. Smith, preceptress, who will gladly assist in making arrangements if desired.

EMPLOYMENT.

THE UNIVERSITY CANNOT PROMISE EMPLOYMENT to those who desire to earn their living. The few places it can offer being always in the hands of old students, new comers cannot expect to get them. The following advice deduced from the observation of several years, is offered to young persons of limited means who want an "education":

- (1) If possible learn a good trade or art before coming to the University. Your chances for work will be greatly increased, and you can get better wages.
- (2) Bring some money—fifty dollars at least—on which to live until you find work.
- (3) If you want work you must look for it. It will not come to you

at first. Be active, resolute, and enterprising. (4) If you have to "pay your way" through college, resolve to take time enough to do it well without ruining your health. It is not essential that you be graduated with any particular class.

EXPENSES.

These depend largely upon the tastes and habits of individuals. The following statement is founded upon statistics furnished confidentially by a considerable number of the older and more experienced students of the past year, under the heads of Board, Washing, Fuel, Light, Books and Stationery, Literary Society, Travel, Clothing, Miscellaneous.

The average necessary expenses of students boarding in families, appear to be about \$310.00; those of students boarding in clubs and otherwise, about \$190.00.

INSTRUCTION IS FREE IN ALL DEPARTMENTS.

The only University charge is the annual fee of \$5.00 for incidental expenses. This fee must be paid before the student can join his classes, and no deductions are made for absence or late entrance.

Students provide their own books and stationery. The literary society expenses are small.

DAILY ROUTINE.

Each week day except Monday is occupied with recitations, lectures and exercises. The work begins at eight o'clock, A. M. and continues throughout the day. A general assembly of students and faculty is held each day at about 10:40 o'clock A. M. There are brief and simple religious exercises, and one or more rhetorical exercises are performed by members of the upper classes.

Most public announcements are made at the assembly, but a written notice on the bulletin must also be regarded as sufficient.

DISCIPLINE.

Students of the various departments or colleges are amenable to their respective Faculties.

The University presumes that every member intends to do his duty and to behave himself decently. Good order, courtesy, punctuality and attentiveness, are established customs of the University, which the student body take pride in maintaining. The few cases of misdemeanor which occur are dealt with individually by the Faculties.

The following by-law of the Board of Regents is in force:

“ Whenever any faculty of the University is satisfied that any student is not fulfilling, and not likely to fulfill the purpose of his attendance upon the University, or is for any cause unfit to remain a member of the same, the president shall so inform his parent or guardian, and if, after reasonable time allowed, the said student shall not have been withdrawn, he may be dismissed by order of the General Faculty.

STUDENT SOCIETIES.

Besides the STUDENTS' CHRISTIAN ASSOCIATION, the literary societies, recognized by the General Faculty, furnish excellent and much prized opportunity for practice in extemporaneous speaking and parliamentary procedure.

The orator of the united literary societies for the year 1878-9 is John Sinclair Clarke, B. A.

ALUMNI ASSOCIATION.

This association was organized in 1875. All graduates of the existing colleges of the University are members; the members of the Board of Regents and of the General Faculty are honorary members. There are the usual officers charged with the cus-

tomary duties. An Executive Committee conducts business not otherwise provided for. The annual meeting is on the day preceding Commencement, at 3 o'clock P. M.

The officers for 1878-9 are:

Dr. S. P. STARRITT, President; Dr. H. C. LEONARD, Secretary and Treasurer.

THE GEOLOGICAL AND NATURAL HISTORY SURVEY.

The University is charged by law with the work of the Geological and Natural History Survey of the State, under the direction of the Board of Regents. This survey has now been in operation seven years, but has been confined principally to the geological portion of the work. More lately the Regents have also ordered a beginning of botanical collections, with a view to the creation of a full herbarium of the flora of the State; and instituted systematic observations and reports on the birds of Minnesota. The professors of the University are selected by the regents for carrying on the various branches of the survey, and the General Museum is the repository and place of exhibition of the collections made during its progress.

The law creating this survey is comprehensive. It embraces not only a strictly geological survey, including a complete account of the rocks and minerals of the State, and their chemical analysis, but also a natural history survey, comprising an examination of all species of trees, shrubs, herbs, grasses, native or naturalized, and a complete account of the animal kingdom, as represented in the State, including all mammalia, fishes, reptiles, birds and insects. It also orders the tabulation of meteorological statistics, and an investigation of the climatic peculiarities of Minnesota. It orders the collection of topographical and hypsometrical data, and the compilation of an accurate map, which, with the approval of the Governor, is to be the official map of the State. The law also requires an exhibition made during the progress of the survey, in the buildings of the University, for public inspection, free of cost, in well warmed and furnished rooms. The regents make annual reports of progress, and, on the completion of any portion of the work, a final report thereof is made to the Governor.

The Collegiate Department. .

THE COLLEGIATE DEPARTMENT.

THE FACULTY.

This Department, as the common avenue to the several university departments and courses of study, is under the immediate control and supervision of the General Faculty of the University.

STUDENTS—1878-9.

FIRST CLASS.

CLASSICAL COURSE.

Messrs. Aiton, Anderson, S.G., Baldwin, Brooks, D.D., Bryant, W.C., Hall, A.H., Kent, King, W.L., Partridge, E., Rowley, Q.J., Snyder.

Miss Hughes, M.F.

SCIENTIFIC COURSE.

Messrs. Broughton, Grimes, G.S., Herrick, Jamison, Jennison, Roberts, Roe.

Misses Burnes, D., Palmer, Williams, L.R.

MODERN COURSE.

Mr. Anson.

Misses Campbell, Coolbaugh, Crafts, Grimes, Kreis, Lawrence, Maes, Town.

SECOND CLASS.

CLASSICAL COURSE.

Messrs. Cobb, Gale, Hancock, Hauser, Healey, F., Hilyer,
Leavens, Morris, T., Nunn, Pickett, Webster, Wilson, J.C.

Misses Brooks, O.E., Holt, C.W., Holt, L.R., Sawyer.

SCIENTIFIC COURSE.

Messrs. Backus, G.J., Barnard, Barrett, W.J., Cook, F.W.,
Fischer, Foster, S.A., Heath, Kennedy, Linton, Locke, S.A.,
Pound, Prosser, Shumway, H.P., Washburn, Whitney.

Misses Leonard and Thompson, E.R.

MODERN COURSE.

Messrs. Dickerman, A.E., Fleming, Grimes, C.M., Johnson,
R.H., Lang, H.D., Lang, W.A., Reynolds, Shenton, Strong,
Wilcox.

Misses Allen, Camp, Curtis, Dexter, Hendrickson, Henry, Holt,
M.E., Hughes, M.N., Kilbourne, Kirkwood, Linton, S.V.,
McMillan, Perkins, Pillsbury.

THIRD CLASS.

CLASSICAL COURSE.

Messrs. Chowen, Cochrane, Elwell, Gould, J.B., Ham, Jones,
D.P., Jones, W.H., Kerr, Kingman, Lawson, Lewis, G.W.,
Lewis, J.R., Martin, Morris, E., Payne, Sanford, Trussell,
Van Cleve.

Misses Pierce and Sheldon.

SCIENTIFIC COURSE.

Messrs. Alden, Bray, Brown, Catherwood, S.D., Folsom, Gray,
Greeley, E.H., Hall, P.M., Haseltine, Hill, F.W., Hinds, G.,
Hoage, Holbrook, Jones, E.C., Jones, R.S., Locke, D.A.,

McNair, Merriman, Peters, W.G., Pratt, F.S., Rhame, Rihel-daffer, Robinson, Rowley, H.W., Salisbury, Schmidt, Sheldon, C.H., Smith, L.O., West, P., Williams, R.S., Young.

Misses Alexander, J.A., Cooper, Demmon, Heath, Lowry, O'Leary, Richardson, E.V., Richardson, L.M.

MODERN COURSE.

Messrs. Cook, C.A., Healy, P.J., McClure.

Misses Alden, Dawley, Ensign, J.M., Gould, Hayes, Hill, Jefferson, Kennedy, Lawrence, A.L., McGaughey, McNair, Mars-ton, Moore, Nunn, Rockwood, H.I., Smith, H.A., Spooner, Swett, Trussell, Weeks, West, A.M., Wilson, Woodmansee.

FOURTH CLASS.

CLASSICAL COURSE.

Messrs. Adams, Beede, Bowman, G.P., Brohough, Burke, Don-nell, Doten, Fay, Gibson, Hill, F., Holt, A.G., Hutchinson, King, R.F., Locke, J.H., Moutoux, Relf, Rowley, L.T., Shel-don, F.S., Smith, F.W., Thompson, J., Williams, W.H., Yarnall.

Misses Brooks, E., and Waite.

SCIENTIFIC COURSE.

Messrs. Anderson, G.W., Backus, E., Bell, Blanding, Bradford, Buell, Carpenter, Chute, Clarke, Crump, Dart, Door, East-wood, Featherstone, Flaherty, Foster, F.P., Hasselquist, Hen-drickson, Hessian, A., Hessian, J., Hinds, W., Howard, Ives, Johnson, F.A., King, J.C.E., Klepper, Kuhlman, Lewis, G.J., Locke, C.M., Loy, McCoy, Malchow, Manchester, Moses, Nachtrieb, Paine, Parsons, Perkins, Phillips, W.J., Pratt, T.W., Rich, Shumway, E.E., Spear, Staples, Trout, Winterer, Woodmansee.

Misses Alexander, M.E., Elwell, Folwell, Hall, Hollister, Lawrence, C.E., Laythe, Lynch, Miller, Moulton, Peterson, Powers, Sabin, Washburn, E., Williams, M.E., Zwinggi.

MODERN COURSE.

Messrs. Bullis, Dickerman, W.H., Hughes, Van Nest.

Misses Aiton, Bray, Burrill, Cushing, Dow, Gallagher, Goodall, Hathaway, Jones, McNear, Miller, Pardee, Souther, Wilkins.

SPECIAL STUDENTS.

Messrs. Baker, Bardwell,* Baxter, Bodeen, Bonniwell,* Brewis, Catherwood, T.L., Chambers,* Cobb, J.W., Frost,* Hackett, Hale, Harriman,* Harrington,* Hayward,* Ingersoll, Juni,* Manderfeld,* Montgomery,* Morey, Muckey, Parkinson, Pemberton, Perry, Peters, H.E., Petri, Phillips, B.Jr.,* Pye, Richards,* Savidge,* Sidener, Smith, F.A.,* Smith, G.B.,* Stockenström, Townsend, G.H., Townsend, S.D., Tupper, E.A., Tupper, W.G.W.

Misses Bonniwell, Brockway, Brown, A., Brown, C. I.,* Choate, Day, Ensign, M. P., Felt, Fletcher,* Florer, Goodrich, Harrington,* Hopkins, Kiefer, Mattson, Mixer, Phelps, Powell, Pratt, Rockwood, J.M., Sweat, Thompson, C.E.,* Tidd, Wyman.

NOTICE.—Those marked "*" are by permission or requirement on the special roll, until they can conveniently take their places in regular classes.

OBJECT.

The object of this Department is to furnish such discipline and information as will fit the student to pursue the higher academical studies of the COLLEGE OF SCIENCE, LITERATURE

AND THE ARTS, or to enter upon the professional courses now offered in the COLLEGES OF AGRICULTURE and MECHANIC ARTS, and hereafter to be offered in colleges not yet opened.

ADMISSION.

The REGULAR ENTRANCE EXAMINATIONS begin on the second day of each University year. Examinations for entrance are commonly held by appointment, at the beginning of the second and third terms, and in Commencement week or soon after. Candidates not presenting themselves at these times, apply in writing to the General Faculty for permission to be privately examined, stating satisfactory reasons for not attending at the stated examinations. Examinations for admission were held in June and July, 1877 and 1878, in several cities and villages of the state. Similar examinations will be held in the summer of 1879. For programme see Appendix.

I.

APPLICANTS for admission to this Department are examined in the following studies:

1. REQUIRED FOR ANY COURSE.—Reading, Writing, Spelling, English Grammar, Arithmetic, Geography, U. S. History, Elementary Algebra, English Composition, Plane Geometry, General History.

In addition to the above, for the—

2. CLASSICAL COURSE.—Greek Grammar and Reader, Latin Grammar and Reader, Cæsar (3 books), Cicero (1 oration.)

3. SCIENTIFIC COURSE.—Natural Philosophy, Physical Geography, Physiology, Free Hand Drawing, English History, Study of Words, Elementary Astronomy, or in place of the last three, the same Latin as in the Classical Course.

4. **MODERN COURSE.**—English History, Study of Words, Physiology, Latin Grammar and Reader, Cæsar (3 books), Cicero (1 oration), or in place of this Latin, Natural Philosophy, Physical Geography, Elementary Astronomy.

Applicants desiring to select their studies, are entitled to apply to the General Faculty for that privilege after having passed the examinations in the following subjects, viz. :

Reading, Writing, Spelling, English Grammar and Analysis, Arithmetic and Elementary Algebra, Geography and United States History, Latin Grammar and Reader, the last, *optional*.

II.

Applicants for admission to the Second or FRESHMAN CLASS of the Collegiate Department will please refer to the tabulated courses of study for the Third or Sub-Freshman Class, and note the studies of the particular course to be chosen. Upon these they will be examined for admission to the Second Class.

Applicants for the FIRST OR SOPHOMORE CLASS will be further examined in the studies of the chosen courses in the Second Class as given in the table.

COURSES OF STUDY.

There are three Courses of Study in this Department :

1. CLASSICAL, 2. SCIENTIFIC, 3. MODERN.

“Applicants are free to select their courses of study upon admission, but cannot thereafter change them, except as allowed by vote of the General Faculty.”

Applicants desiring to pursue Greek and Latin, will select the CLASSICAL Course.

Those desiring to pursue German and French, with or without Latin, will select the MODERN Course.

Those desiring to pursue a *course* of scientific studies, will select the SCIENTIFIC Course.

Scientific students can take but one language at a time. This may be English, Latin or Greek, or German followed by French.

Scientific students will govern themselves in choice of language according to the following regulation :

“Scientific students are required, upon admission, to select [the language or languages they will respectively pursue, and cannot thereafter change, except as allowed by vote of the General Faculty: PROVIDED, however, that Scientific students shall be free to elect. * * * French at the beginning of the third year, dropping the languages theretofore respectively pursued; subject to the action of the General Faculty, in each case.”

A suitable blank is furnished upon which applicants announce their choices of course.

The General Faculty have authority to admit applicants to select their studies from the regular courses, being governed in the exercise of their discretion by the following resolution of the Board of Regents :

Resolved, That the admission of special students to the University be left to the discretion of the General Faculty, it being deemed unadvisable on the part of the Board of Regents to adopt any inflexible rule in the premises. But as a general rule students should be required to follow one of the prescribed courses of studies, unless in exceptional cases the General Faculty deem it expedient to relax it.

Each student completing a course receives a Final Certificate, which admits him to any appropriate college of the University, at the beginning of the Junior Year.

The following schedules do not include rhetorical, military, and other exercises, which are held according to appointment from time to time. Special students are NOT exempt from these exercises.

The statements of the professors under the head of “Instruction,” on pages 35 to 59 should be carefully read by the student.

For the scheme of rhetorical exercises in this Department now in force, see page 49; for that of the military exercises, see page 59.

FOURTH CLASS.

This Class was discontinued at the close of the last University year, June 5th, 1879. The studies have been added to the list of requirements for admission; see page 78. The modifications of the Courses of Study occasioned by this action as well as by changes in the corps of instruction, will be announced in due time.

THIRD CLASS.—(FIRST YEAR.)

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Xenophon,— <i>Anabasis</i> .	1. Drawing (10 hours.)	1. German (<i>begun</i>)
	2. Algebra.	2. Algebra.	2. Algebra.
	3. Cicero,— <i>Orations</i> . Drawing (5 hours). (<i>Optional</i>).	3. English— <i>Higher Gram.</i> or German (<i>begun</i>), or Cicero,— <i>Orations</i> .	3. Cicero,— <i>Orations</i> . Drawing (5 hours) (<i>Optional</i>).
II.	1. Xenophon,— <i>Anabasis</i> .	1. Physics,— <i>Sound and Heat</i> .	1. German, (<i>continued</i>).
	2. Geology,— <i>Elements</i> .	2. Geology,— <i>Elements</i> .	2. Geology,— <i>Elements</i> .
	3. Virgil,— <i>Æneid</i> .	3. English, (<i>continued</i>) or German, (<i>continued</i>) or Virgil,— <i>Æneid</i> .	3. Virgil,— <i>Æneid</i> .
III.	1. Botany,— <i>Elements</i> .	1. Botany,— <i>Elements</i> .	1. German,— <i>Selections</i> .
	2. Higher Algebra.	2. Higher Algebra.	2. Higher Algebra.
	3. Virgil,— <i>Æneid</i> .	3. English, (<i>continued</i>) or Virgil,— <i>Æneid</i> , or German,— <i>Selections</i> .	3. Virgil,— <i>Æneid</i> , or Botany,— <i>Elements</i> .

NOTE 1.—The classes of this department will hereafter be designated exclusively Sophomore, Freshman and Sub-Freshman.

2.—For Junior and Senior studies, see Colleges of "Science, Literature and the Arts," "Mechanic Arts," and "Agriculture" *infra*.

SECOND CLASS —(SECOND YEAR.)

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Greek,— <i>Homer</i> .	1. General Chemistry.	1. German,— <i>Lessing</i> .
	2. Solid Geometry and Trigonometry.	2. Solid Geometry and Trigonometry.	2. Solid Geometry and Trigonometry.
	3. General Chemistry.	3. English,— <i>Hist. Gram.</i> German,— <i>Lessing</i> .	3. General Chemistry.
II.	1. Greek,— <i>Homer</i> .	1. Draughting. (10 hours.)	1. German,— <i>Schiller</i> .
	2. Analytic Geometry. (3) History,— <i>Medieval</i> . (2)	2. Analytic Geometry. (3) History,— <i>Medieval</i> . (2)	2. Analytic Geometry. (1) History,— <i>Medieval</i> . (2)
	3. Latin,— <i>Livy</i> .	3. English,— <i>Readings</i> , or German,— <i>Schiller</i> , or Latin,— <i>Livy</i> .	3. Latin,— <i>Livy</i> .
III.	1. Greek,— <i>Selections</i> .	1. Applied Chemistry.	1. German,— <i>Goethe</i> .
	2. Physics,— <i>Light and Electricity</i>	2. Physics,— <i>Light and Electricity</i> .	2. Physics,— <i>Light and Electricity</i> .
	3. Latin,— <i>Livy</i> .	3. English, (<i>continued</i>) or German,— <i>Goethe</i> , or Latin,— <i>Livy</i> .	3. Latin,— <i>Livy</i> .
	4. Surveying. (2 hours.) (<i>Optional</i> .)	4. Surveying. (2 hours.) (<i>Required</i> .)	2. Surveying. (2 hours.) (<i>Optional</i> .)

FIRST CLASS.—(THIRD YEAR.)

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Latin,— <i>Horace</i> .	1. Physics,— <i>Mechanical</i> .	1. French, (<i>begun</i>).
	2. Logic.	2. Logic.	2. Logic.
	3. English— <i>Anglo-Saxon</i> or French, (<i>begun</i> .)	3. English— <i>Anglo-Saxon</i> , French, (<i>begun</i>), or Latin,— <i>Horace</i> .	3. English— <i>Anglo-Saxon</i> .
II.	1. Greek,— <i>Oratory</i> .	1. Descriptive Geometry.	1. French (<i>continued</i>).
	2. Rhetoric.	2. Rhetoric.	2. Rhetoric.
	3. English— <i>Anglo-Saxon</i> or French, (<i>continued</i>).	3. English— <i>Anglo-Saxon</i> or French (<i>continued</i>).	3. English— <i>Anglo-Saxon</i>
	4. Mechanics. (2 hours.)	4. Analytical Chem. (6)	4. Mechanics. (2 hours.)
III.	1. Greek,— <i>One Tragedy</i> .	1. Zoology— <i>Elements</i> .	1. French— <i>Selections</i> .
	2. Astronomy— <i>Desc.</i> (3) History,— <i>Modern</i> . (2)	2. Astronomy— <i>Desc.</i> (3) History,— <i>Modern</i> . (2)	2. Astronomy— <i>Desc.</i> (3) History— <i>Modern</i> . (2)
	3. Latin,— <i>Tacitus</i> .	3. English— <i>Early Eng.</i> , or French,— <i>Selections</i> , or Latin— <i>Tacitus</i> .	3. Zoology.
		4. Analytical Chem. (4)	

1. The members of the Second Class are required to attend a course of ten lectures on Practical Ethics, delivered by the Professor of Mental and Moral Philosophy, during the Second Term.

2. The members of the Fourth Class, and all students lately admitted, are required to attend a short course of lectures on the use of the library, and the relations of students to the University, delivered by the president during the first term.

3. Modern students are at liberty to select, upon admission, the scientific studies of the Scientific Course, in their order, in lieu of the course in Latin.

4. Modern students are free to choose between Latin and Botany, in the third term of the first year.

5. Each student, whether regular or special, must have, as a general rule three recitations a day (15 per week), besides rhetorical, military and other exercises. The faculty, upon application in writing, may, in their discretion excuse a student from one or two studies, or may allow an additional study or exercise.

6. Applications for a change of course, to drop a study, to take an extra study, and the like, are not entertained after the close of the second week of any term; and such applications, when made by students under age, must be endorsed with the approval of a parent or guardian. Changes in course of study, except in urgent cases, will only be allowed at the beginning of the year.

EXAMINATIONS.

Examinations are held in every study at the close of each term. The marks for these are combined with the daily marks for recitations in such a way as to throw increasing weight upon the examinations as the student proceeds from year to year in his course. In order to be "passed" in any study or exercise, the student must obtain sixty-five per cent. of the available marks. The object of the marking system is to preserve, for the use of the Faculty a convenient record of the diligence and proficiency of the students, so far as these can be inferred from the average of numerous approximate judgments. Statements of standing will be furnished to parents or guardians at any time, upon request. Students receive notice of failures and deficiencies.

All examinations are conducted in writing, but any professor or instructor in charge, may add such oral questions as he may deem proper.

At the end of each year a general average is made by dividing the sum of all per cents gained by the number of studies and exercises. Students whose average falls below sixty-five per cent. cannot be advanced in rank.

REGULATIONS.

Students pledge themselves in their applications to be regular and punctual in attendance upon all proper duties and exercises.

All students of this department are required to attend the daily assembly. Absentees present their excuses, stating reasons, with the president.

Absentees from recitations or exercises present their excuses on the proper blank to the professor in charge.

Students who have been unable to prepare for a recitation or exercise, present excuses in writing to the professor in charge, on entering the room.

Students failing to pass in any study at the close of a term, are liable to be cited for re-examination at any time thereafter, either by the professor or the Faculty; and students remaining "conditioned" at the end of the year, are examined at the beginning of the next university year, at such times and places as may be announced on the morning of the second day. Conditioned students failing to attend such examinations, must render satisfactory reasons in writing to the General Faculty, before joining their classes. For the programme of these examinations, see appendix.

Students desiring to be examined in studies of classes above them, apply in writing to the General Faculty. Leave being granted, they attend, if practicable, the examinations of the advanced class, or, if not, undergo examinations equivalent thereto.

Students who may have been absent from recitations for a part or a whole of a term, for sufficient reasons, are entitled to individual examinations adapted to fully test their proficiency, and, if successful, are "passed" thereupon.

No student can be advanced in rank whose conditions amount in the aggregate to more than one term's work.

Students who are absent from all university duties for six consecutive days without leave, and do not report the causes of such detention, are dropped from the rolls and forfeit their registry.

Students desiring to be absent for some time, apply in writing on the blank provided, to the General Faculty, for leave of absence.

Absentees from examinations apply in writing to the General Faculty for excuses; if excuse is granted, they are entitled to individual examinations equivalent to those undergone by their classes.

Unexcused absences, unexcused failures to prepare lessons and perform duties, and misdemeanors, are recorded, and demerit marks are charged. When a student has accumulated 12 such marks he receives a warning in private; when 24, notice is given to his parent or guardian; at 36, a public warning is given; at 48, the student is suspended during the pleasure of the General Faculty.

These regulations apply to special as well as to regular students.

THE COLLEGE OF
Science, Literature and the Arts.

THE COLLEGE OF SCIENCE, LITERATURE
AND THE ARTS.

THE FACULTY.

Professors CAMPBELL,	MOORE,
BROOKS,	MARSTON,
THOMPSON,	LAING,
WINCHELL,	TRIPP,
PECKHAM,	HALL,

The President.

STUDENTS, 1878-9.]

GRADUATES.

CANDIDATES FOR MASTERS' DEGREES.

GRAHAM COX CAMPBELL, B. A., 1877, for M. A.

JOEL NATHANIEL CHILDS, B. A., 1877, for M. A.

ROBERT HENRY CRAFTS, B. S., 1876, for M. S.

HENRY CLAY LEONARD, M. D., B. S., 1878, for M. S.

CHARLOTTE ADELAIDE ROLLIT, B. L., 1877, for M. L.

UNDERGRADUATES.

SENIOR YEAR.

CLASSICAL COURSE.

Messrs. COLLOM, GOODNOW, MCKEAN, RHAMES, ROCKWOOD,
THOMPSON, G. B., WEST, W. M.

Miss ELLIOT.

SCIENTIFIC COURSE.

Messrs. BARRETT, W. S., BOWMAN, F. C., BYRNES, GAGE, GREER,
PARTRIDGE, G. H.

Misses BURNES, C. A., CHAMPLIN, LINTON, THOMPSON, E.

MODERN COURSE.

Messrs. BASSETT, HILDRETH, KEYSOR.

Misses ROE, ROLLIT, WEST, M. I.

JUNIOR YEAR.

CLASSICAL COURSE.

Messrs. BROOKS, A. P., BRYANT, J. F., FOSTER, F. H., RANKIN,
WILLIAMS, W. W.

Miss KNOX.

SCIENTIFIC COURSE.

Messrs. BERRY, F. G., GREELEY, SMITH, G. W., SMITH, H. P.

Misses REYNOLDS and TODD.

MODERN COURSE.

Messrs. HOLT and HORTON.

Miss HOUSE.

ADMISSION.

Applicants who have completed courses of study in the Collegiate Department, are entitled to admission to the corresponding courses of this college. Other applicants, if candidates for graduation, must pass equivalent examinations. Persons desiring to pursue special studies in this college, apply in writing to the Faculty, and submit to such tests as the Faculty or the professors concerned require.

OBJECT.

This college is intended to furnish higher courses of LIBERAL studies leading to the customary academical degrees. Much of the instruction is given by lectures, and in general the methods and discipline are those proper to University students.

COURSES OF STUDY.

There are three regular under-graduate courses, as given below. They are arranged according to the following principles :

1. The leading study of each course is characteristic.
2. There are in general in each course 15 hours per week of recitations and lectures, besides rhetorical and other exercises, not shown in the schedules.
3. There are ten hours per week of prescribed, and at least five of optional or elective work.

The elective studies of any course are commonly the required studies of the other courses

JUNIOR YEAR.

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
	1. Greek,— <i>Philosophy</i> .	1. Calculus, (<i>begun</i>).	1. German,— <i>Gæthe</i> .
I.	2. Compar. Philology. (2) Hist. of Civilization (3)	2. Compar. Philology. (2) Hist. of Civilization. (3)	2. Comparative Philology History of Civilization.
	3. Calculus (<i>begun</i>), or German,— <i>Gæthe</i> , or Analytical Chemistry.	3. German,— <i>Gæthe</i> , or Analytical Chemistry, or Military Engineering	3. Calculus (<i>begun</i>), or Analytical Chemistry.
	1. Latin,— <i>Philosophy</i> .	1. Mineralogy.	1. German,— <i>Lessing</i> .
II.	2. English Literature.	2. English Literature.	2. English Literature.
	3. German,— <i>Lessing</i> , or Calculus (<i>continued</i>), or Mineralogy.	3. Latin,— <i>Philosophy</i> , or German,— <i>Lessing</i> , or Calculus (<i>continued</i>), or Analytical Chemistry, or Military History, etc.	3. Latin,— <i>Philosophy</i> , or Calculus (<i>continued</i>), or Mineralogy.
	1. Latin,— <i>Oratory and Comedy</i> .	1. Geology.	1. German,— <i>Literature</i> .
III.	2. Psychology.	2. Psychology.	2. Psychology.
	3. Geology, or German— <i>Literature</i> , or Theory of Equations.	3. Latin,— <i>Oratory</i> , etc., or German— <i>Literature</i> , or Theory of Equations, or Analytical Chemistry, or Military Law, etc.	3. Geology, or Latin,— <i>Oratory</i> , etc., or Theory of Equations.

SENIOR YEAR.

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Greek,— <i>Lectures</i> .	1. Astronomy.	1. French.
	2. History of Philosophy.	2. History of Philosophy	2. History of Philosophy.
	3. Astronomy, or English,— <i>Criticism</i> , or French, or Scandinavian Lang.	3. English,— <i>Criticism</i> , or French, or Scandinavian Lang or Analytical Chemistry	3. Astronomy, or English,— <i>Criticism</i> , or Scandinavian Lang
II.	1. Greek,— <i>Selections</i> .	1. Civil Government & Correlation of Sciences (1).	1. Civil Government (4), & Correlation of Sciences (1).
	2. Ethics.	2. Ethics.	2. Ethics.
	3. Civil Government, & Correlation of Sciences (1) or French, or Scandinavian Lang.	3. French, or Analytical Chemistry, or Scandinavian Lang.	3. French, or Scandinavian Lang
III.	1. Political Economy.	1. Political Economy.	1. Political Economy.
	In addition each member of the class is required to <i>elect</i> from the following list, work amounting to seven hours per week: English Literature (3), International Law (2), Fine Arts (1), Sanitary Science (1), Natural Theology (2), Ancient Languages (2), German (5), French (3), Analytical Chemistry (3), Anthropology (1), Recent History (1). The instruction closes with the eleventh week of the term.		

1. When not otherwise indicated by an appended figure, the studies and exercises named in the tables occur five times in the week.

2. For rhetorical exercises see page 49.

3. Military Science, although appearing in the table as an alternate third study for the Scientific Course in the Junior Year, may also be taken (as an alternative) by students in the Classical and Modern Courses.

4. Analytical Chemistry may likewise be pursued by students in the Classical and Modern courses, for one year only; and such students may elect between the Junior and Senior years.

5. Students of the Classical and Scientific courses who begin German in the Junior year, are at liberty to continue it as an alternative during the Senior year.

6. Classical and Scientific students who have not previously had French, can take it in the Senior Year.

GRADUATIONS.

Students completing courses of study to the satisfaction of the Faculty of the college, are entitled respectively to receive the appropriate baccalaureate degrees, to-wit: Bachelor of Arts, Bachelor of Science, Bachelor of Literature.

For Masters' Degrees see page 40.

Any person may undergo, at suitable times, examination in any subject; and if such person pass in all the studies and exercises of a course, he is entitled to the appropriate degree.

EXAMINATIONS.

The proficiency of students of this college in the various departments of instruction, is ascertained by means of examinations only. These take place at the end of each term, and are conducted in writing. The results are estimated on a scale of one hundred. The merit of the rhetorical and other exercises are reduced to the same scale at the end of each term. A minimum mark of 75 per cent. in each study and exercise is necessary to "pass."

REGULATIONS.

Students of this college are expected to attend the daily assembly, and are required to be present when appointed to deliver public rhetorical exercises.

Absentees from lectures, recitations and other duties, report their excuses to the professors concerned. Three unexcused absences in any term debar a student from examination in any department of instruction.

No student may have less or more than fifteen hours* of work per week, unless by consent of the Faculty; and no member of this college can become a candidate for graduation in another department or college, without leave of the Faculty first obtained.

*Analytical Chemistry, and laboratory work in general, require "double hours."

The College of Mechanic Arts.

THE COLLEGE OF MECHANIC ARTS.

THE FACULTY.

Professors THOMPSON, PECKHAM,
 RHAME, PECK,
 MARSTON, HALL,
 The President.

STUDENTS, 1878-9.

SENIOR YEAR.

CIVIL ENGINEERING.

Messrs. DAWLEY and FURBER.

MECHANICAL ENGINEERING.

Mr. CARVILLE.

ADMISSION.

Applicants who have completed the Scientific Course of the Collegiate Department, are entitled to admission to the Junior Class without further examinations. Other applicants, if candidates for graduation, must pass satisfactory examinations in all the studies of that course. Applicants for special studies in this college are admitted to the classes, if competent, in the judgment of the professors concerned, to receive the instruction. Mechanics and others who have not time to take a full course, but have only a few months of the year at their disposal, will be admitted to SPECIAL STUDIES and given free instruction in Drawing, and directed in such other work as may be most profitable in the time at their command.

OBJECT.

The aim of the instruction given in this college is to lay a broad and solid foundation in Mathematics, Mechanics and

Drawing, so that with the practice in field, shop and office work given to the students in the respective courses, they shall be fitted for immediate usefulness upon graduation, and after a moderate amount of subsequent practice and experience, be capable of taking charge of important works.

COURSES OF STUDY.

Three regular undergraduate courses have been organized upon the following data:

1. There are fifteen lectures or recitations per week, besides drawing, field and shop work, and the rhetorical and other exercises.
2. As a general rule, there are ten hours per week of prescribed work, and five of elective.
3. The electives are chosen from corresponding years and terms of this and other colleges.

JUNIOR YEAR.

Term	CIVIL ENGINEERING.	MECHANICAL ENG.	ARCHITECTURE.
I.	1. Higher Surveying and Drawing.	1. Machinery and Drawing.	1. Hist. of Architecture and Drawing.
	2. Differential Calculus.	2. Differential Calculus.	1. Differential Calculus.
	3. Hist. of Civilization Compar. Philology <i>or other elective.</i>	3. Hist. of Civilization Compar. Philology <i>or other elective.</i>	3. Hist. of Civilization (3) Compar. Philology (2) <i>or other elective.</i>
II.	1. Mechanics and Drawing.	1. Mechanics and Drawing.	1. Mechanics, and Drawing.
	2. Integral Calculus.	2. Integral Calculus.	2. Integral Calculus.
	3. Mineralogy, <i>or other elective.</i>	3. Mineralogy, <i>or other elective.</i>	3. Mineralogy <i>or other elective.</i>
III.	1. Geodesy and Stereotomy	1. Motore and Stereotomy.	1. Constructions, and Stereotomy.
	2. Theory of Equations.	2. Theory of Equations.	1. Theory of Equations.
	3. Geology, <i>or other elective.</i>	3. Geology, <i>or other elective.</i>	3. Geology, <i>or other elective.</i>

SENIOR YEAR.

Term	CIVIL ENGINEERING.	MECHANICAL ENG.	ARCHITECTURE.
I.	1. Field Engineering-- <i>Railway work with Drawing.</i>	1. Machinery, with Draw- <i>ing.</i>	1. Architect'l Designing, <i>with Drawing.</i>
	2. Applied Mechanics-- <i>(Strength and Stress of Materials.)</i>	2. Applied Mechanics-- <i>(Strength and Stress of Materials.)</i>	2. Applied Mechanics-- <i>(Strength and Stress of Materials.)</i>
	3. Astronomy.	3. Astronomy.	3. Astronomy, <i>or other elective.</i>
II.	1. Engineering Structures <i>(Framing, Bridges, etc.)</i>	1. Mechanical Construc- <i>tions.</i>	1. Engineer's Structures, <i>(Framing, Roofs, etc.)</i>
	2. Practical Physics.	2. Practical Physics.	2. Practical Physics.
	3. Civil Government, &c., <i>or other elective.</i>	3. Civil Government, <i>or other elective.</i>	3. Civil Government, <i>or other elective.</i>
III.	1. Building Materials-- <i>(Woods, Stones, Bricks, Mortars, Etc.)</i>	1. Building Materials-- <i>(Woods, etc.)</i>	1. Building Materials-- <i>(Woods, etc.)</i>
	2. Analytical Mechanics.	2. Analytical Mechanics.	2. Professional Practice.
	3. Political Economy, <i>or other elective</i>	3. Political Economy, <i>or other elective.</i>	3. Political Economy, <i>or other elective.</i>

For rhetorical exercises see page 49.

The third study in the foregoing course is, as a general rule, elective. The one named is generally recommended to be taken, but the student is free to pursue any of the authorized "electives."

Students who, by electing Analytical Chemistry in the Junior Year are debarred from taking Mineralogy and Geology, may pursue these studies in the Senior Year, and have credit accordingly.

GRADUATIONS.

Students completing the foregoing courses to the satisfaction of the Faculty, are entitled respectively to receive the appropri-

ate baccalaureate degrees, to-wit: Bachelor of Civil Engineering, Bachelor of Mechanical Engineering, Bachelor of Architecture. For second degrees see page 42.

Special students receive certificates for successful examinations in the branches pursued. Any person is entitled to undergo examination in any subject; and if such person pass in all the studies and exercises of any course, he is entitled to the appropriate degree.

EXAMINATIONS.

The proficiency of students in this college is ascertained by examinations conducted in writing, at the close of each term. These are estimated on a scale of one hundred. The marks for the rhetorical and other exercises are reduced to the same scale at the close of each term. A minimum of 75 per cent. in each study and exercise is necessary to "pass."

METHODS OF INSTRUCTION.

Instruction in the several subjects pertaining to Civil and Mechanical Engineering and Architecture, is given by text-books, lectures, reading in the general library, and practical exercises; the theory being applied in the solution of practical problems and the construction of original drawings.

The college possesses a good compass, transit instrument, level, and in a variety of measures ample opportunity is afforded to become familiar with their use in actual field operations.

Descriptive Geometry taught in the Collegiate Department, preparatory to several studies in the different courses in this college, is illustrated by means of a full set of beautiful models made by Schröder of Darmstadt, Germany. Together with these were imported several models of roofs and bridges by the same maker, to serve as guides to students in Architecture and Bridge Building, who, to fix the principles learned in the class-room, are required to make trusses and other constructions.

A beginning has been made in fitting up a shop for the accommodation of students in Mechanical Engineering. The University possesses a lathe with the necessary tools, to which additions will be made as fast as practicable.

Field practice is a portion of the regular course in Civil Engineering. The classes in Surveying are drilled in actual work of lotting out and measuring land, as well as in the solution of various geometrical and trigonometrical problems, from data taken by members of the classes themselves. The class in Railroad engineering have practice in laying out curves, taking levels, cross-sectioning, staking out; in fact in all the work of locating a railroad line, from the preliminary survey up to the point of actual construction.

REGULATIONS.

Students of this college are expected to attend the morning assembly, and are required to be present when appointed to deliver public rhetoricals.

Absentees from lectures, recitations, and other duties, render excuses to the professors concerned. Five unexcused absences in any term debar from the examinations in that department of instruction.

No student may have more or less than 15 hours work per week, without leave of the Faculty.

No student of this college can become a candidate for a degree in another college, without leave of the Faculty first obtained.

The College of Agriculture.

THE COLLEGE OF AGRICULTURE.

THE FACULTY.

Professors PECKHAM, MARSTON,
LACY, (Secretary,) HALL,
The President.

STUDENTS, 1878-9.

ELEMENTARY COURSE—Mr. Mathes.

SPECIAL STUDENTS—Messrs. Wood (B. L., 1877), Girling,
and Wilson J. G.

FACILITIES FOR INSTRUCTION.

Students in the College of Agriculture receive the benefit of the library and apparatus of the University, as well as of those belonging to this College. The whole may be enumerated as follows.

(1.) The General Library of the University, containing nearly 13,000 volumes, and receiving frequent additions. More than one hundred volumes are especially devoted in a practical manner to the subjects of agriculture, horticulture, tree culture and stock raising. Besides these are several hundred volumes on botany, zoology, anatomy, physiology and other sciences related to agriculture. More than half a dozen strictly agricultural papers and periodicals are regularly received in the Reading Room.

(2.) The General Museum of the University, containing a large collection of minerals, casts of extinct animals, stuffed mammals and birds.

(3.) The Museum of Technology, containing materials and products used in illustrating manufacturing processes.

(4.) The Museum of Agriculture, containing at present a collection of models of machines and implements, a collection of the seeds of garden vegetables, grains and grass seeds in glass jars; a collection of grains and grasses in the straw; a collection of fruits in alcohol; a large collection of woods from the U. S. Department of Agriculture; a collection of plates and lithographs; miscellaneous objects and materials used in agriculture. Donations are always welcome.

(5.) Chemical and Physical Laboratories, supplying opportunities for the student to practice with his own hands.

(6.) Drawing Rooms.

(7.) Engineers and Surveyor's instruments.

(8.) The Plant House, 24x84 feet, supplying plants and flowers for the study of botany, and apparatus for instruction in the propagation and care of plants.

(9.) The State Experimental Farm, containing 120 acres, used for testing the different varieties of vegetables, grains and fruits, is made to illustrate as much as possible the principles taught in the class room. Over 400 distinct varieties were planted in 1877. The reports of the experiments are sent free to all applicants.

SCOPE OF INSTRUCTION.

IN AGRICULTURAL CHEMISTRY—A study of the elements of the volatile part of plants, as carbon and oxygen: a study of the organic compounds of

plants, as water, starch and sugar: a study of the elements of the ash of plants and their compounds, as potassium, calcium, iron, sulphates and phosphates: a study of the atmosphere and the soil as related to vegetation and as sources of food to plants: a course in the analysis of soils, fertilizers, grains and fodders.

IN ECONOMIC ENTOMOLOGY—General characters of insects; characters and peculiarities of those families containing useful or injurious members; together with a special study of the more important individuals of these families.

IN HORTICULTURE—Relations of heat, light, moisture and food to plant growth, and the means of controlling their supply and intensity; plant houses, hot beds, &c.; soils and manures, and their manipulation; propagation of plants; grafting, budding, pruning, training, &c.; planting and transplanting; hybridizing, crossing and selecting; cultivation of the apple, pear, plum and other large fruits; cultivation of the currant, strawberry, raspberry, cranberry, and other small fruits; kitchen gardening, market gardening, landscape gardening, and floriculture.

IN ARBORICULTURE—Reasons for planting forest trees; what trees to plant; methods of propagating; care in the nursery; special culture of each species.

IN PRACTICAL AGRICULTURE—History of Agriculture; brief review of chemical composition and physical properties of air and water as related to the soil and vegetation; the chemical constituents and practical classification of soils; properties, peculiarities, treatment and adaptations of each kind; reclamation and improvement of soils, including drainage, subsoiling, trenching, altering, fallowing, paring and burning, preparatory tillage, road making and fencing; manufacture, preservation and application of manures and stimulants; green manuring and irrigation; farm implements and machinery; production, management and sale of the different crops; the different breeds of farm animals, their characteristics and adaptations; breeding, rearing, feeding and management for the different purposes to which each is suited; selection and purchase of farms; the situation, relative position, size and internal arrangements of farm buildings, and their adaptation to purposes for which intended.

IN COMPARATIVE ANATOMY AND PHYSIOLOGY—Anatomy, physiology and hygiene of the domestic animals.

IN VETERINARY MEDICINE AND SURGERY—Prevention and treatment of diseases and injuries of the domestic animals.

ECONOMICS--Farm accounts, grain raising, stock raising, dairying, general farming, fruit culture, market gardening and other specialties; relations and sequence of farm operations; legislation relating to agriculture; relations of agriculture to commerce, manufactures, labor, government, taxation, &c.

TEXT BOOKS AND BOOKS OF REFERENCE--Johnson's *How Crops Grow and How Crops Feed*; Caldwell's *Agricultural Chemical Analysis*; Thomas's *American Fruit Culturist*; Fuller's *Small Fruit Culture*; Bryant's *Forest Trees*; Chauveau's *Anatomy of the Domestic Animals*; Gray's *Systematic Botany*, Darlington's *American Weeds and Useful Plants*; Downing's *Fruits and Fruit Trees of America*; Harris's *Insects Injurious to Vegetation*; *Entomological Reports*; Morton's *Cyclopedia of Agriculture*; Stephens's *Book of the Farm*; Allen's *New American Farm Book*; Allen's *American Cattle*; Randall's *Practical Shepherd*; Harrison's *Pig*; Gamgee's *Domestic Animals in Health and Disease*; Stonchenge's *The Horse in the Stable and the Field*; Law's *Farmer's Veterinary Adviser*; Waring's *Handy Book of Husbandry*.

I. THE REGULAR UNDERGRADUATE COURSE.

OBJECTS.

The studies and exercises of this course are designed to give to students already well instructed in liberal studies, and in general sciences, special training in the sciences related to Agriculture, including their practical application.

ADMISSION.

This course properly follows the Scientific Course of the Collegiate Department, but it may also follow either of the other courses of that department or the Elementary Course in Agriculture. Applicants who have completed any of these courses are therefore entitled to admission to this college. Other applicants, if candidates for graduation, must be examined in the same or equivalent studies.

The studies of both courses are given in the following

SCHEDULE.

I. Scientific Course, Collegiate Department.

Class.	FIRST TERM.	SECOND TERM.	THIRD TERM.
III.	1. Drawing (10 hours).	1. Physics— <i>Sound and Heat</i> .	1. Botany,— <i>Elements</i> .
	2. Algebra.	2. Geology,— <i>Elements</i> .	2. Higher Algebra.
	3. English,— <i>Higher Gram.</i> or German (<i>begun</i>), or Cicero,— <i>Orations</i> .	3. English (<i>continued</i>), or German, (<i>continued</i>) or Virgil,— <i>Aeneid</i> .	3. English, (<i>continued</i>) or Virgil,— <i>Aeneid</i> , or German,— <i>Selections</i> .
II.	1. General Chemistry.	1. Draughting (10 hours).	1. Applied Chemistry.
	2. Solid Geometry and Trigonometry.	2. Analytic Geometry, History,— <i>Medieval</i> .	2. Physics,— <i>Light and Electricity</i> .
	3. English,— <i>Historical Gram.</i> or German,— <i>Lessing</i> .	3. English,— <i>Readings</i> , or German,— <i>Schiller</i> , or Latin,— <i>Livy</i> .	3. English, (<i>continued</i>) or German,— <i>Goethe</i> ; or Latin,— <i>Livy</i> .
I.	1. Physics,— <i>Mechanical</i> .	1. Descriptive Geometry.	1. Zoology,— <i>Elements</i> .
	2. Logic.	2. Rhetoric.	2. Astronomy— <i>Descriptive</i> , (3) History,— <i>Modern</i> . (2)
	3. English,— <i>Anglo-Saxon</i> , French, (<i>begun</i>) or Latin,— <i>Horace</i> .	3. English,— <i>Anglo-Saxon</i> , or French (<i>continued</i>).	3. English,— <i>Early Eng.</i> , or French,— <i>Selections</i> , or Latin,— <i>Tacitus</i> .
		4. Analytical Chemistry.	4. Analytical Chemistry.

II. Regular Course, College of Agriculture.

JUNIOR YEAR.

FIRST TERM.	SECOND TERM.	THIRD TERM.
1. Agricultural Chemistry— <i>(Composition of Plants and Soils.)</i>	1. Agricultural Chemistry— <i>(Analysis of Soils.)</i>	1. Agricultural Chemistry. <i>(Analysis of Fertilizers and Foods.)</i>
2. Horticulture.	2. Meteorology and Climatology	2. Arboriculture and Economic Entomology.
3. History of Civilization, Comparative Philology, or other elective. (3) (2)	3. Mineralogy, or other elective.	3. Geology, or other elective.

SENIOR YEAR.

FIRST TERM.	SECOND TERM.	THIRD TERM.
1. Practical Agriculture— <i>(Soils and Fertilizers)</i>	1. Practical Agriculture— <i>(Farm Crops.)</i>	1. Practical Agriculture— <i>(Farm Animals.)</i>
2. Comparative Anatomy and Physiology.	2. Veterinary Medicine and Surgery.	2. Economics— <i>(Accounts, etc.)</i>
3. History of Philosophy, or other elective.	3. Civil Government, (4), and Correlation of the Sciences (1), or other elective.	3. Political Economy, or other elective.

For Rhetorical Exercises see page 49.

The third study named in the above table is the one recommended to be generally taken, but students are free to pursue any one of the other authorized electives.

Students completing the above course to the satisfaction of the Faculty, are entitled to receive the degree of Bachelor of Agriculture.

II. THE ELEMENTARY COURSE.

This course agrees in the main with the Scientific Course of the Collegiate Department, but differs from it in the substitution of some natural sciences and practical instruction for languages and mathematics in the latter part. The requisites for admission are the same as for admission to the Collegiate Department.

ELEMENTARY COURSE.

Class.	FIRST TERM.	SECOND TERM.	THIRD TERM.
III.	1. Mechanical Drawing.	1. Geology.	1. Botany.
	2. Plane Geometry.	2. Physics.	2. Higher Algebra.
	3. English, or German.	3. English, or German.	3. English, or German.
II.	1. General Chemistry.	1. Drawing.	1. Applied Chemistry.
	2. Solid Geometry, and Trigonometry.	2. Agricultural Chemistry. <i>How Crops Feed.</i>	2. Surveying, and Farm Drainage.
	3. English, or German.	3. English, or German.	3. English, or German.
I.	1. Mechanical Physics.	1. Practical Agriculture. <i>Farm Crops.</i>	1. Practical Agriculture. <i>Farm Animals.</i>
	2. Horticulture.	2. Meteorology, and Climatology.	2. Zoology.
	3. English, or French.	3. English, or French.	3. English, or French.

So far as practicable, the students in the Elementary course recite with the classes of the Collegiate Department. The same rhetorical, military and other exercises are required as in that department. Ancient languages are *optional*.

While the above schemes indicate when regular and systematic instruction in the different studies will be given, instruction in PRACTICAL agriculture and horticulture will be given at various times throughout the whole course. The farm and gardens will be made to afford every possible facility for observation and practice, and enough of the latter will be required of all regular students in this department to give them skill in the different operations of the farm and garden.

III. SPECIAL COURSES.

While the above courses of study are provided for those who desire a systematic education in scientific Agriculture, the Board of Regents provide in their by-laws for the ADMISSION OF ANY PERSONS TO ANY CLASS, upon the sole condition that they appear to be competent to receive the instruction.

Under the authority of this by-law the following courses for the year 1878-9 have been arranged. They are not designed in any way to limit the advantages offered by the by-law. Any person who can read and write the English language, can enter either course without examination.

SPECIAL COURSES IN AGRICULTURE.

I.

Beginning First Term September 16th, 1879.

FIRST TERM.	SECOND TERM.	THIRD TERM.
1. Agricultural Chemistry.— (<i>How Crops Grow.</i>)	1. Agricultural Chemistry.— (<i>How Crops Grow.</i>)	1. Farm Drainage, and Farm Accounts.
2. Agriculture.— (<i>Soils and Manures.</i>)	2. Agriculture.— (<i>Farm Animals.</i>)	2. Agriculture.— (<i>Farm Crops.</i>)
3. Horticulture.— (<i>Fruits.</i>)	3. Arboriculture.	3. Horticulture.— (<i>Vegetables.</i>)

II.

Beginning Second Term, December 9th, 1879.

SECOND TERM.	THIRD TERM.
1. Agricultural Chemistry.— (<i>How Crops Grow.</i>)	1. Farm Drainage, and Farm Accounts.
2. Agriculture. (<i>Farm Animals.</i>)	2. Agriculture, (<i>Farm Crops.</i>)
3. Arboriculture.	3. Horticulture, (<i>Vegetables.</i>)

III.

Beginning Third Term, March 9th, 1880.

1. Farm Drainage, and
Farm Accounts.

2. Agriculture,
(*Farm Crops.*)

3. Horticulture,
(*Vegetables.*)

IV. THE FARMER'S LECTURE COURSE.

This course is specially designed to meet the wants of farmers and others who desire scientific and practical information relating to their calling, and whose business prevents them from spending an entire year away from home. These lectures will extend through six weeks, two being given on each of five days in the week, while exercises equivalent to a third lecture will be given in practice in the Chemical Laboratory, in Drawing, in Farm Accounts, or in reading in the library.

The instruction given will be both scientific and practical. The former will include Agricultural Chemistry, Botany, Physiology, Entomology, Geology, and Mechanics, and will be given by those professors who have these departments in charge in the University. The latter will include the Improvement of Soils by Drainage, Subsoiling, Trenching, Plowing, Rotations, Manures, &c., Grain Raising, Stock Raising, Dairying, Fruit Culture, Forest Culture, Farm Accounts, and Rural Architecture, and will be given by the Professor of Agriculture, and by men who have become successful and noted in these special departments.

No fees, examinations, or other conditions, will be imposed for admission to this course, but its advantages will be ABSOLUTELY FREE TO ALL.

NOTICE.—The above course of lectures will be given next year (1879-80), provided that by the first day of November, 1879, thirty persons not members of any class in the University shall have signified to Professor Chas. Y. Lacy their intention to attend this course.

APPENDIX.

Important Act of the Legislature, Proceedings of the High School Board, Entrance Examinations for the year 1879-80, Almanac for 1879-80, Etc.

AN ACT FOR THE ENCOURAGEMENT OF HIGHER EDUCATION, AS
AMENDED MARCH, 8, 1879.

Be it enacted by the Legislature of the State of Minnesota:

SECTION 1 The Superintendent of Public Instruction, and the President of the University of Minnesota, *ex officio*, and one other person to be appointed by the Governor, and subject to removal by the Governor for cause, to hold his office for three years, and until his successor is appointed and qualified, unless sooner removed, are hereby constituted a Board of Commissioners on preparatory schools for the encouragement of higher education in this State. The board shall be called "the High School Board," and shall perform the duties, and have and exercise the powers hereinafter mentioned.

SEC. 2. Any public graded school in any city or incorporated village or township organized into a district under the so-called township system, which school shall give preparatory instruction according to the terms and provisions of this act, and shall admit students of either sex from any part of the State without charge for tuition, shall be entitled to receive pecuniary aid as hereinafter specified; provided, however, that no such school shall be required to admit non-resident pupils unless they shall pass an examination in all the branches prescribed by law as requisite to a third grade county certificate, except algebra, plane geometry and the theory and practice of teaching.

SEC. 3 The said board shall require of the schools applying for such pecuniary aid, as pre-requisite to receiving such aid, compliance with the following conditions, to wit:

FIRST. That there be regular and orderly courses of study, embracing all the branches prescribed as pre-requisite for admission to the collegiate department of the University of Minnesota, not lower than the sub-freshman class.

SECOND. That the said schools receiving pecuniary aid under this act shall at all times permit the said Board of Commissioners, or any of them, to visit and examine the classes pursuing the said preparatory courses.

SEC. 4 provides for inspections of the schools

SEC. 5 appropriates the sum of \$20,000 (annually) to be apportioned among the schools, \$400 to each

SEC. 6 The members of said Board shall serve without compensation, except the last named member

SEC. 7 The said Board shall have power to establish any necessary and suitable rules and regulations relating to examinations, reports and other proceedings under this act

SEC. 8 The said Board shall keep a careful record of all their proceedings and shall make . . . in each year a report.

SEC. 9. This act shall take effect, &c.

REGULATIONS ADOPTED BY THE HIGH SCHOOL BOARD IN PURSUANCE
OF THE FOREGOING ACT.

FIRST—Schools receiving pecuniary aid under this act shall require pupils intending to take the courses of study prescribed in rule fourth (4), below, to pass a satisfactory examination in such studies as the High School Board may prescribe.

SECOND—Until otherwise directed, the following studies shall be embraced in such examinations, to wit: orthography, reading, penmanship, arithmetic, English grammar, modern geography and history of the United States.

THIRD—The examinations shall be conducted by the principal teacher of the school, or other person designated by the board of trustees, or board of education, as the case may be. Uniform lists of questions accompanied by detailed regulations for their use will be furnished on application to the High School Board.

FOURTH—The general courses of study in said schools preparatory to the Third or Sub-Freshman class, shall embrace the following branches, to wit: elementary algebra, plane geometry, physical geography, phy-iology, natural philosophy, English composition, general history, latin grammar and reader, and two books of Cæsar's Commentaries, the writing of English in connection with the foregoing studies, with especial reference to correct punctuation and use of capitals; also exercises in reading and declamation. When practicable, instruction in vocal music and drawing should be added. For a full clasical course an examination in the Greek grammar and reader will also be required, and by students taking this course, natural philosophy, physical geography and physiology may be omitted.

FIFTH—The High School board does not limit schools as to the time to be devoted to the courses of study, nor as to the order in which the several studies shall be taken up, but it is suggested that the time should be not less than two years.

SIXTH—Schools preparing students to enter the Freshman class of the University will include in their courses of study in addition to the branches above named all studies required of the Sub-Freshman class in the University.

The following schools having complied with the provisions of the law have been "accepted" by the High School Board:

Albert Lea, Austin, Blue Earth City, Caledonia, Chatfield, Detroit, Duluth, Eyota, Faribault, Garden City, Glencoe, Hastings, Henderson, Howard Lake, Lake City, Lanesboro, Le Sueur, Litchfield, Mankato, Mantorville, Monticello, Moorhead, Northfield, Osseo, Owatonna, Red Wing, Redwood Falls, Rochester, Rushford, Sauk Center, St. Cloud, St. Peter, Waseca, Waterville, Wells, Willmar, Winnebago City, Zumbrota.

Correspondence should be addressed to the Hon. Chas S. Bryant, Secretary of the High School Board, Capitol Building, St. Paul, Minn.

ENTRANCE EXAMINATIONS 1879-80.

These will be held at the following times and places.

I. SOUTHEAST DISTRICT—PROF. JABEZ BROOKS, IN CHARGE.

RED WING.....	June 9	ST. CHARLES.....	June 18
LAKE CITY.....	" 11	ROCHESTER.....	" 20
WABASHA.....	" 13	ZUMBROTA.....	" 24
WINONA.....	" 16		

II. SOUTH DISTRICT—PROF. E. J. THOMPSON, IN CHARGE.

FARIBAULT.....	June 9	LANESBORO.....	June 18
OWATONNA.....	" 11	ALBERT LEA.....	" 20
AUSTIN.....	" 13	MANKATO.....	" 23
SPRING VALLEY.....	" 16	LE SUEUR.....	" 25

III. NORTH DISTRICT—PROF. J. G. MOORE, IN CHARGE.

ST. CLOUD.....	June 10	WILLMAR.....	June 20
SAUK CENTER.....	" 12	LITCHFIELD.....	" 23
ALEXANDRIA.....	" 16	HUTCHINSON.....	" 25
FERGUS FALLS.....	" 18	GLENCOE.....	" 27

IV. IN MINNEAPOLIS, AT THE UNIVERSITY, JUNE 27, AND AT THE BEGINNING OF THE NEW YEAR, SEPT. 10, 8:30 A. M.

Examinations begin at 9 a. m. unless otherwise announced.

These examinations will be open to all persons who desire to enter the University. Applicants so desiring may offer part of the subjects and postpone the remainder to some later examination.

Writing materials will be furnished. For RULES, see Calendar of 1877-8.

II. PROGRAMME FOR THE REGULAR ENTRANCE EXAMINATIONS AT THE
UNIVERSITY, SEPTEMBER, 10th, 1879.

WEDNESDAY, SEPTEMBER 10.

8.30 A. M.	Preliminaries.
9.00 "	Writing and Spelling.
9.30 "	English Grammar.
10.30 "	Arithmetic.
11.30 "	Geography.
2.00 P. M.	U. S. History.
3.00 "	Elementary Algebra.
3.45 "	Latin Grammar.
4.45 "	Reading (remainder.)

THURSDAY, SEPTEMBER 11.

9.00 A. M.	English Composition.
10.05 "	Plane Geometry.
11.10 "	General History.
2.00 P. M.	Physiology and Greek Grammar.
3.05 "	Cæsar.
4.10 "	English words.

FRIDAY, SEPTEMBER 12.

9.00 A. M.	Natural Philosophy and Geom. Drawing.
10.05 "	Algebra and Physical Geography.
11.10 "	Geology and Elementary Astronomy.
2.00 P. M.	Botany and English History.
3.05 "	Xenophon and German Grammar.
4.10 "	Physics (of III class) and Freehand Drawing.

SATURDAY, SEPTEMBER 13.

9.00 A. M.	Cicero and English (of III classes.)
10.00 "	Virgil.
11.10 "	Rhetoricals (to II class.)

The Physical Examinations and Health Record by Professor Hewitt will take place at convenient times to be announced.

All students of the Collegiate Department, who are conditioned in any of the studies named in the above programme, are required to be present for examination at the proper hours named; and any such students failing to attend as thus required must render satisfactory reasons, in writing, to the General Faculty, before being admitted to the classes.

There will also be the following examinations for students of the Collegiate Department, conditioned in the studies of the FIRST and SECOND classes. Such students are required to attend under the same rule as above.

THURSDAY, SEPTEMBER 12.

9.00 A. M.	General Chemistry.
10.05 "	Homer, of II class; German of II class; English of II class; Anglo-Saxon of I class.
10.10 "	Solid Geometry and Trigonometry.
2.00 P. M.	Livy of II class.
3.05 "	Applied Chemistry.
4.10 "	Analytical Chemistry of I class.

FRIDAY, SEPTEMBER 13.

9.00 A. M.	Molecular Physics and Descriptive Astronomy.
10.05 "	Zoology.
11.10 "	Horace and Tacitus (of I class) and Med. History.
2.00 P. M.	French (of I class) and Drawing of II class.
3.05 "	Mechanical Physics
4.10 "	Logic.

SATURDAY, SEPTEMBER 14.

9.00 A. M.	Greek of I class, and Descriptive Geometry.
10.05 "	Modern History.
11.10 "	Rhetoric and Surveying.

ALMANAC 1878-9.

SEPTEMBER, 1879.

9	Tues.	{ YEAR 1879-80 BEGINS. Gen Faculty meets 9 a. m. Special Facs. meet on call. Entrance examination 8 a. m. Entrance examinations contin. Examinations—advanced rank. Examinations concluded. 1 w. Recitations and lectures begin. Library and Museum open Gen. Fac. meet Saturdays at [4 p. m., 2 w. Literary Societies meet 7½ p.m. Military instruction begins. 8 w. 3 w. 8 w. 10 w. 11 w. 12 w.
10	Wed.	
11	Thurs.	
12	Fri.	
13	Sat.	
14	SUN.	
15	Mon.	
16	Tues.	
17	Wed.	
18	Thurs.	
19	Fri.	
20	Sat.	
21	SUN.	
22	Mon.	
23	Tues.	
24	Wed.	
25	Thurs.	
26	Fri.	
27	Sat.	
28	SUN.	
29	Mon.	
30	Tues.	

OCTOBER, 1879.

1	Wed.	Fac. Coll. S. L. & A., 5 p. m. [4 w. 5 w. State Constitution, 1857. 6 w. 7 w.
2	Thurs.	
3	Fri.	
4	Sat.	
5	SUN.	
6	Mon.	
7	Tues.	
8	Wed.	
9	Thurs.	
10	Fri.	
11	Sat.	
12	SUN.	
13	Mon.	
14	Tues.	
15	Wed.	
16	Thurs.	
17	Fri.	
18	Sat.	
19	SUN.	
20	Mon.	
21	Tues.	
22	Wed.	
23	Thurs.	
24	Fri.	
25	Sat.	
26	SUN.	
27	Mon.	
28	Tues.	
29	Wed.	
30	Thurs.	
31	Fri.	

NOVEMBER, 1879.

1	Sat. 8 w. Election Day. Fac. Coll. S. L. & A , 5 p. m., [9 w. 10 w. 11 w. 12 w. NATIONAL THANKSGIVING DAY 12 w.
2	SUN.	
3	Mon.	
4	Tues.	
5	Wed.	
6	Thurs.	
7	Fri.	
8	Sat.	
9	SUN.	
10	Mon.	
11	Tues.	
12	Wed.	
13	Thurs.	
14	Fri.	
15	Sat.	
16	SUN.	
17	Mon.	
18	Tues.	
19	Wed.	
20	Thurs.	
21	Fri.	
22	Sat.	
23	SUN.	
24	Mon.	
25	Tues.	
26	Wed.	
27	Thurs.	
28	Fri.	
29	Sat.	
30	SUN.	

DECEMBER, 1879.

1	Mon.	Examinations. do. FIRST TERM ENDS.....13 w. Recess. SECOND TERM BEGINS. Recitations and Lectures begin. Gen. Fac. meet Saturdays, 4 p. [m. 1 w. Fac. Coll. Agr. meet 4 p. m. Fac. Coll. Mech. Arts, 4 p. m. 2 w. Recess until January 2d. CHRISTMAS DAY.
2	Tues.	
3	Wed.	
4	Thurs.	
5	Fri.	
6	Sat.	
7	SUN.	
8	Mon.	
9	Tues.	
10	Wed.	
11	Thurs.	
12	Fri.	
13	Sat.	
14	SUN.	
15	Mon.	
16	Tues.	
17	Wed.	
18	Thurs.	
19	Fri.	
20	Sat.	
21	SUN.	
22	Mon.	
23	Tues.	
24	Wed.	
25	Thurs.	
26	Fri.	
27	Sat.	
28	SUN.	
29	Mon.	
30	Tues.	
31	Wed.	

JANUARY, 1880.		FEBRUARY, 1880.	
1 Thurs.	NEW YEAR'S DAY.	1 SUN.	
2 Fri.		2 Mon.	
3 Sat.	Fac. Coll., S. L. & A., 5 p. m.,	3 Tues.	
4 SUN.	[3 w.]	4 Wed.	
5 Mon.		5 Thurs.	
6 Tues.		6 Fri.	
7 Wed.		7 Sat.	Fac. Coll., S. L. & A., 5 p. m.,
8 Thurs.		8 SUN.	[8 w.]
9 Fri.		9 Mon.	
10 Sat.	.....4 w.	10 Tues.	
11 SUN.		11 Wed.	
12 Mon.		12 Thurs.	
13 Tues.		13 Fri.	
14 Wed.		14 Sat.	.....9 w.
15 Thurs.		15 SUN.	
16 Fri.		16 Mon.	
17 Sat.	.....5 w.	17 Tues.	
18 SUN.		18 Wed.	University Charter, 1868.
19 Mon.		19 Thurs.	
20 Tues.		20 Fri.	
21 Wed.		21 Sat.	.....10 w.
22 Thurs.		22 SUN.	WASHINGTON'S BIRTHDAY
23 Fri.		23 Mon.	
24 Sat.	.....6 w.	24 Tues.	
25 SUN.		24 Wed.	
26 Mon.		25 Thurs.	
27 Tues.		26 Fri.	
28 Wed.		27 Sat.	.....11 w.
29 Thurs.		28 SUN.	
30 Fri.			
31 Sat.			
MARCH, 1880.		APRIL, 1880.	
1 Mon.		1 Thurs.	
2 Tues.	Examinations.	2 Fri.	
3 Wed.	do	3 Sat.	Fac. Coll., S. L. & A., 5 p. m.
4 Thurs.	SECOND TERM CLOSÉS ..12 w	4 SUN.	[4 w.]
5 Fri.		5 Mon.	
6 Sat.		6 Tues.	Last day for briefs of Com-
7 SUN.		7 Wed.	[mencement parts.]
8 Mon.	[9 a. m.]	8 Thurs.	
9 Tues.	THIRD TERM BEGINS. Gen Fac.	9 Fri.	
10 Wed.	Recitations and Lectures beg.	10 Sat.	.....5 w.
11 Thurs.		11 SUN.	
12 Fri.		12 Mon.	
13 Sat.	Gen. Fac. meet Saturdays, 4	13 Tues.	
14 SUN.	[p. m.]	14 Wed.	
15 Mon.		15 Thurs.	
16 Tues.	Fac. Coll. Agr. meet, 4 p. m.	16 Fri.	
17 Wed.		17 Sat.	.....6 w.
18 Thurs.	Fac. Coll. Mech., Arts, 4 p m.	18 SUN.	
19 Fri.		19 Mon.	
20 Sat.	.....2 w.	20 Tues.	
21 SUN.		21 Wed.	
22 Mon.		22 Thurs.	
23 Tues.		23 Fri.	
24 Wed.		24 Sat.	.....7 w.
25 Thurs.		25 SUN.	
26 Fri.	Good Friday.	26 Mon.	
27 Sat.	.....3 w.	27 Tues.	Last day for drafts of Com-
28 SUN.	Easter-day.	28 Wed.	[mencement parts.]
29 Mon.		29 Thurs.	
30 Tues.		30 Fri.	
31 Wed.			

MAY, 1880.		JUNE, 1880.	
1 Sat.	Fac. Coll. S. L. and A.. 5 p. m.		
2 SUN.	[8 w.		
3 Mon.		1 Tues.	CLASS DAY.
4 Tues.			
5 Wed.			
6 Thurs.			
7 Fri.			
8 Sat.	.....9 w.		
9 SUN.		2 Wed.	SOCIETY OF ALUMNI, 3 p. m. Address, 8 p. m.
10 Mon.			
11 Tues.	Last day for final copy of Com-		
12 Wed.	mencement parts.		
13 Thurs.			
14 Fri.		3 Thurs.	THE COMMENCEMENT.
15 Sat.	.....10 w.		
16 SUN.			
17 Mon.			
18 Tues.			
19 Wed.			
20 Thurs.			
21 Fri.		4 Fri.	THE VACATION BEGINS.
22 Sat.	Senior work closes .....11 w.		
23 SUN.			
24 Mon.			
25 Tues.			
26 Wed.	Library closes for annual in-		
27 Thurs.	ventory.		
28 Fr	Examinations.		
29 Sat	do .....12 w.		
30 SUN.	[ties, 8 p. m.		
31 Mon.	Address before Literary Socie-		

The First Term of the University year 1880-81 will begin September 7, 1880, at 8 a. m.

IMPORTANT RESOLUTION OF THE BOARD OF REGENTS.

Resolved, That it being the desire and intention of the Board, in discontinuing the Fourth Class, to raise the standard of admission to the University by a full year's work in all courses of study, without, at the same time lowering the standard of graduation, the General and Special Faculties are strictly enjoined not to relax the accustomed rigor of examinations for admission, not to admit applicants with conditions beyond a reasonable and customary degree, and not to increase the number of special students without weighty and justifiable reasons.

Resolved, further, That this Board will fully sustain the Faculties in their efforts to maintain and advance the standard of scholarship, irrespective of the numbers of students and of graduates.

General Correspondence should be addressed

“PRESIDENT OF THE UNIVERSITY OF MINNESOTA,
Minneapolis, Minnesota.”

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