
THE UNIVERSITY OF MINNESOTA.

THE
CALENDAR

FOR THE YEAR

1879-80.

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

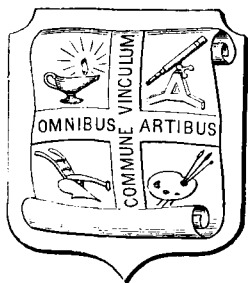
The Calendar will be sent gratuitously, postage paid, to all persons in the State who apply for it.

THE
UNIVERSITY OF MINNESOTA.

THE
CALENDAR

FOR THE YEAR

1879-80.



BY THE UNIVERSITY,
MINNEAPOLIS.

1880.

*University of Minnesota.***DAYS AND DATES, 1879-80.**

1879.**JUNE 7.** THE VACATION BEGAN.**SEPTEMBER 9.** YEAR 1879-80 BEGAN.10. }
11. } Entrance Examinations.12. }
13. } Examinations for advanced rank.

16. Recitations and Lectures began.

DECEMBER 2. }
3. } Examinations.

4. First Term (13 weeks) closed.

9. Second Term began.

Recess.

December 20 to January 6.

1880.**MARCH 2.** }
3. } Examinations.

4. Second Term (12 weeks) closed.

9. Third Term (13 weeks) began.

MAY 28. }
29. } Examinations.**JUNE 3.** COMMENCEMENT.

For days and dates of the new year 1880-81, see Almanac near end.

THE BOARD OF REGENTS.

The Hon. PARIS GIBSON,* M. A., Minneapolis,	
The Hon. RICHARD CHUTE, Minneapolis.	- - - 1881.
The Hon. WILLIAM R. MARSHALL, St. Paul,	- - - "
The Hon. A. J. EDGERTON, M. A., Kasson,	- - - "
The Hon. HENRY H. SIBLEY, St. Paul,	- - - 1882.
The Hon. THOS. S. BUCKHAM, M. A., Faribault,	- - - "
The Hon. GREENLEAF CLARK, M. A., St. Paul,	- 1883.
The Hon. O. V. TOUSLEY, M. A., Minneapolis,	- - - "

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.

*Resigned Dec. 27, 1879.

OFFICERS OF THE BOARD.

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

PRESIDENT.

The Hon. PARIS GIBSON. Minneapolis, to Jan. 15, 1880,

The Hon. RICHARD CHUTE. Minneapolis, after Jan. 15, 1880,
Recording Secretary and Treasurer.

WILLIAM W. FOLWELL. Minneapolis.

Corresponding Secretary.

STANDING COMMITTEES.

Executive Committee—Regents PILLSBURY, GIBSON and CHUTE.

Committee on Faculty and Courses of Study—Regents SIBLEY,

MARSHALL, BURT, BUCKHAM and EDGERTON.

Committee on College of Agriculture—Regents MARSHALL, BUCK-

HAM and EDGERTON.

Auditing Committee—Regents MARSHALL and CLARK.

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 last secular day of 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., *602 14th Ave., S. E.*
Professor of Mathematics and Astronomy.

NEWTON H. WINCHELL, M. A., Prof. Geol. & Min., *State St., E. D.*
State Geologist.

CHARLES N. HEWITT, M. D., *Red Wing.*
Professor of Public Health, Non-resident.

MITCHELL D. RHAME, B. A., *University Avenue.*
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 Modern Languages.

MOSES MARSTON. M. A.. *2211 Park Ave., W. D.*

Professor of the English Language and Literature.

Professor of Military Science.

CHARLES Y. LACY. B. Agr., *204 4th St., S. E.*

Professor of the Theory and Practice of Agriculture.

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.

CHARLOTTE A. ROLLIT. *Assistant Librarian.*

ALBERT W. RANKIN. *Ass't in Chemical Laboratory,*

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

FACULTIES OF THE UNIVERSITY.

THE GENERAL FACULTY.

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

THE SPECIAL FACULTIES.

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

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

II. Of the College of Mechanic Arts:

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

III. Of the College of Agriculture:

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

GRADUATES.**BACHELORS IN ARTS.**

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

Graduates.

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Charles Wilbur Savidge,	Le Sueur County,	1877.
Albert McClure Welles,	Ramsey "	"
Julian Clarence Bryant,	Nicollet "	1878.
John Hamilton Lewis,	Wright "	"
Thomas Rogers Newton,	Hennepin "	"
Evan Roland Pritchard,	Blue Earth "	"
Daniel Williams,	Iowa,	"
John Franklin Collom,	Hennepin "	1879.
Etta Medora Elliot,	" "	"
John Finley Goodnow,	" "	"
Frank Smith McKean,	Washington "	"
Robert William Rhames,	Olmsted "	"
Chelsea Joseph Rockwood,	Blue Earth "	"
George Burt Thompson,	Hennepin "	"
Willis Mason West,	Stearns "	"

BACHELORS IN SCIENCE.

Edward Chatfield,	Fillmore County,	1874.
Clark Stewart,	Hennepin "	1875.
Samuel Addison Rank,	Fillmore "	"
Martha Appleton Butler,	Maine,	1876.
Robert Henry Crafts,	Hennepin "	"
William Herod Locke,	" "	"
Lewis Singer Gillette,	Michigan,	"

Eugene Alvin Hendrickson,	Ramsey County,	1876.
Albert Preston Hendrickson,	“ “	1877.
John Charles Kassube,	Hennepin “	“
Edwin Burnham Pribble,	“ “	“
Fred Leslie Couillard,	“ “	1878.
Nettie Getchell,	“ “	“
Judson Torrey Howell,	Houston “	“
Mary Warwick Robinson,	Hennepin “	“
Harvey Jay Smith,	Goodhue “	“
Myron De Vere Taylor,	Stearns “	“
William John Warren,	Rice “	“
Henry Clay Leonard,	(B. C. E., (1875,))	“
Walter Barrett,	Dodge County,	1879.
Fred Capin Bowman,	Meeker “	“
Catherine Amelia Burnes,	Hennepin “	“
Timothy Edward Byrnes,	Meeker “	“
Evelyn May Champlin,	Hennepin “	“
Addison Gage, Jr.,	Anoka “	“
Allen Jay Greer,	Wabasha “	“
Laura Alberta Linton,	“ “	“
George Henry Partridge,	Winona “	“
Etta Thompson,	Hennepin “	“

BACHELORS IN LITERATURE.

Helen Mar Ely,	Winona County,	1875.
Matilda Jane Campbell,	Maine,	1877.

Graduates.

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Viola Fuller,	Mower County,	1877.
Charlotte Adelaide Rollit,	Hennepin "	"
Mary Anna Maes,	Steele "	1878.
George Albert Wood,	Fillmore "	"
William Lincoln Bassett,	Hennepin "	1879.
Alvin Hildreth,	Freeborn "	"
William Winchester Keysor,	Blue Earth "	"
Marion Hooker Roe,	Washington "	"
Caroline Rollit,	Hennepin "	"
Martha Isabel West,	" "	"

BACHELORS IN CIVIL ENGINEERING.

Henry Clay Leonard,	Fillmore County,	1875.
Samuel Addison Rank,	" "	"
Clark Stewart,	Hennepin "	"
Lewis Singer Gillette,	Michigan,	1876.
Eugene Alvin Hendrickson,	Ramsey "	"
Charles Edward Thayer,	Hennepin "	"
William Sanborn Dawley,	Wabasha "	1879.
Pierce Power Furber,	Washington "	"

BACHELOR IN MECHANICAL ENGINEERING.

Charles Spencer Bushnell,	Hennepin County,	1878.
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BACHELOR IN ARCHITECTURE.

Walter Stone Pardee,	Hennepin County,	1877.
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STUDENTS.**ALPHABETICAL ROLL, 1879-80.**

The Classes of the Collegiate Department are indicated as heretofore:
 SOPHOMORE, I.; FRESHMEN, II.; SUB-FRESHMEN, III.

Adams, Elmer Ellsworth.	Morrisville, Vt.	Classical, III.
Aiton, George Briggs.	St. Peter.	Classical, Jun.
Aiton, Jeanie Lincoln.	"	Modern, III.
Alden, Elizabeth Emma.	Minneapolis.	Modern, II.
Alexander, Jane Amelia.	"	Scientific, III.
Alexander, Mary Ellen.	"	Scientific, III.
Allen, Emma Frances.	Hamilton.	Modern, I.
Anderson, George William,	Featherstone.	Scientific, III.
Anderson, John,	Collinwood.	Scientific, III.
Anderson, Samuel Gilmore,	Eden Prairie.	Classical, Jun.
Backus, George Joseph.	Red Wing.	Scientific, I.
Backus, Edward.	"	Scientific, III.
Baker, Nathan Morton, Jr.,	St. Peter.	Scientific, III.
Baldwin, Albert Melancthon,	Tower City, D.T.	Modern, III.
Baldwin, Edward Payson,	"	Classical, III.
Baldwin, Otway Wilkinson.	Clear Lake.	Classical, I.
Bardwell, Fred Leslie,	Minneapolis.	Scientific, Jun.

Barnard, Frank Marshall,	Minneapolis.	Scientific, I.
Barr, John Henry,	Mankato.	Scientific, III.
Barrett, William Johnson,	Wasioja.	Scientific, I.
Bell, Robert Mowry,	Sauk Center.	Scientific, II.
Berry, Frederick Gerald,	Brooklyn.	Scientific, Sen.
Boardman, William Burrell,	Calais, Me.	Classical, III.
Bondurant, Ripley C.,	Alexandria.	Scientific, III.
Bonniwell, Agnes Virginia,	Hutchinson.	Special.
Bonniwell, Harlow Horace,	"	Special.
Bowman, George Paris,	Minneapolis Tp.	Classical, III.
Bradford, Belle Marion,	Empire.	Modern, III.
Brewis, John James,	Bloomington.	Special, Eng.
Brooks, Anna Eliza,	Minneapolis.	Classical, III.
Brooks, David Denslow,	"	Classical, I.
Brooks, Olive Emma,	"	Classical, I.
Broughton, Herbert John.	"	Scientific, I.
Brown, Cora Inez,	"	Classical, Sen.
Brown, Fred. Henry,	Monticello.	Special.
Bryant, James Francis,	St. Peter.	Classical, Sen.
Bryant, William Cullen,	"	Classical, Jun.
Buckley, Edmund.	Birmingham, E.	Classical, III.
Buell, Dwight Allen.	Caledonia.	Special.
Bullis, Charles Henry,	Decorah, Iowa.	Modern, III.
Burnes, Diana,	Minnetonka.	Scientific, I.

Burrill, Nettie Ellen,	Champlin.	Modern, III.
Camp, Addie Louise,	Minneapolis.	Modern, I.
Campbell, Margaret Agnes,	Nova Scotia.	Modern, Jun.
Case, Lewis Hinman,	Lake City, D. T.	Scientific, II.
Catherwood, Samuel Doak,	Austin.	Special.
Chambers, William Henry,	Bloomington.	Special.
Chowen, Herbert Oscar,	Minneapolis.	Classical, Jun.
Chute, William Young,	"	Scientific, III.
Clark, Wyckoff William,	Mankato.	Scientific, I.
Clarke, Frederick Henry,	Boston, Mass.	Scientific, III.
Cleveland, George S., Jr.,	Minneapolis.	Special.
Clough, Elizabeth,	Austin.	Modern, III.
Cook, Cyrus Abraham,	Cannon Falls.	Special.
Cook, Frank Willis,	Minneapolis.	Scientific, I.
Crafts, Lettie May,	"	Modern, Jun.
Curtis, Grace Webster,	Decorah, Iowa.	Modern, I.
Dart, Walter Scott,	Owatonna.	Scientific, III.
Demmon, Alice Elizabeth,	Minneapolis.	Scientific, I.
Dickerman, Arthur Edwin,	Decorah, Iowa.	Modern, I.
Dickerman, Walter Herbert,	"	Modern, II.
Donnell, Edwin Cone,	Sheepscot, Me.	Classical, III.
Donohue, Jeremiah Ignatius,	Pilot Mound.	Scientific, III.
Drake, Albert S.	Dover.	Scientific, III.
Eastwood, John Samuel,	Minneapolis.	Special.

Elwell, Mary Whitmore.	Cottage Grove.	Scientific, III.
Fay, William Eastman.	Minneapolis.	Classical, II.
Fellows, James Frank.	Winnebago Cy.	Scientific, III.
Fitzgerald, Patrick Thomas.	Donnelly.	Scientific, III.
Fletcher, Carrie Delania.	Mankato.	Special.
Folwell, Mary Heywood.	"	Scientific, III.
Foster, Fred. Platt,	Hyde Park.	Scientific, III.
Gale, Edward Chenery.	Minneapolis.	Classical, I.
Gallagher, Catherine Louisa.	"	Modern, III.
Gaylord, Edson Starr.	"	Classical, II.
Gilman, Israel C.	Lake Crystal.	Special.
Gould, Annie Evelyn.	Minneapolis.	Modern, II.
Gould, James Bennett.	Eden Prairie.	Classical, I.
Gray, James Edwin.	Lake City.	Scientific, II.
Greeley, Eddy Horace.	Owatonna.	Classical, III.
Greeley, Horace Burnham.	Mapleton.	Scientific, Sen.
Grimes, Emma Elizabeth.	Minneapolis Tp.	Modern, Jun.
Grimes, George Sutherland.	"	Scientific, Jun.
Hale, Idianna.	Minneapolis.	Special.
Hall, Alberton Heath.	"	Classical, I.
Hall, Pearl Mitchell.	"	Special.
Ham, Frank Wells.	"	Classical, III.
Hancock, James Otis.	Red Wing.	Classical, I.
Harrington, Martha Addie.	Hutchinson.	Special.

Harrington, Wm. Edmund.	Hutchinson.	Special.
Hasselquist, Joshua.	Rock Island.	III. Scientific, II.
Hathaway, Cora Belle.	Pleasant Grove.	Modern, III.
Hayes, Emma Louise.	Minneapolis.	Modern, II.
Hayward, William Henry,	St. Cloud.	Special.
Healy, Frank.	Preston.	Classical, I.
Heath, Addie Maria.	Lincoln.	Scientific, III.
Heath, Samuel Fuller.	"	Scientific, I.
Hendrickson, Emma Laura.	St. Paul.	Modern, I.
Hendrickson, George Lorenzo,	"	Scientific, III.
Henry, Marie Louise.	Minneapolis.	Modern, I.
Herrick, Clarence Luther.	"	Scientific, Sen.
Hessian, John.	St. Peter.	Scientific, III.
Hill, Franklin Davis.	Pine Island.	Classical, III.
Hill, Frank Willard.	Minneapolis.	Scientific, III.
Hilyer, Andrew Franklin,	"	Classical, I.
Hinds, George.	Shakopee.	Scientific, II.
Hinds, William.	"	Scientific, III.
Hoage, William Ricketson.	Rochester.	Scientific, II.
Hollister, Louise Elma.	Marshfield.	Scientific, II.
Holt, Andrew.	Carver.	Modern, Sen.
Holt, Arthur Graves.	Chatfield.	Classical, III.
Holt, Carrie Warner.	"	Classical, I.
Holt, Lydia Rossiter.	"	Classical, I.

Holt, Mary Eliza.	Chatfield.	Modern, I.
Horton, Joseph Elisha.	Preston.	Modern, Sen.
House, Elizabeth Augusta.	Minneapolis.	Modern, Sen.
Hughes, Martha Frances.	"	Classical, I.
Hughes, Mary Nancy.	"	Modern, I.
Hughes, William Franklin.	Butternut Val'y.	Modern, III.
Hutchinson, Joseph Henry.	Hastings.	Classical, III.
Jamison, Robert.	Red Wing.	Scientific, I.
Jefferson, Annie Harriët.	Minneapolis.	Modern, II.
Jennison, James.	Red Wing.	Scientific, Jun.
Johnson, Anthony.	Newburg.	Scientific, III.
Johnson, Frank Amos.	Marshall.	Scientific, II.
Johnson, Richard Hartwell.	St. Charles.	Modern, I.
Jones, David Percy.	Minneapolis.	Classical, III.
Jones, Edward Corydon.	"	Scientific, II.
Jones, Richard Saxe.	Rochester.	Scientific, II.
Jones, William Hugh.	Mankato.	Classical, II.
Kearney, John Stanislaus.	Minneapolis.	Special.
Kennedy, Joseph.	Oshawa.	Scientific, I.
Kennedy, Kate Louise.	Minneapolis.	Modern, II.
Kennedy, Patrick.	Oshawa.	Special.
Kent, Charles Edward.	Toledo, Ohio.	Classical, Jun.
Kerr, Joseph Howe.	Canning, N. S.	Classical, II.
Kilbourne, Louise Lillian.	Minneapolis.	Modern, I.

King, James Charles Elliot,	Otsego.	Classical, III.
King, Royal Fairfield,	Fargo, D. T.	Classical, III.
King, William Leslie,	Garden City.	Classical, Jun.
Klepper, George Horace,	Albert Lea.	Scientific, III.
Knox, Frances Ada,	Spring Valley.	Classical, Sen.
Kreis, Laura Augusta,	Monticello.	Modern, Jun.
Kuhlman, Etna,	New Ulm.	Scientific, III.
Lambert, F. A.,	Austin.	Scientific, III.
Lang, Henry David,	St. Paul.	Modern, I.
Lang, William Anthony,	"	Modern, I.
Larson, Eli,	Bratsburg.	Scientific, III.
Lawrence, Annie Laurie,	Minneapolis.	Modern, III.
Lawrence, Bessie Sumner,	"	Modern, Sen.
Lawrence, Cora Eliza,	"	Scientific, III.
Laythe, Bessie,	Chatfield.	Scientific, III.
Leavens, Frank Nichols,	Faribault.	Classical, I.
Lewis, George John,	Butte City.	Scientific, III.
Lewis, George Winthrop,	Red Wing.	Classical, II.
Lewis, John Robert,	Bristol.	Classical, III.
Linton, William Beans,	Cook's Valley.	Scientific, I.
Locke, Cassius Marcins,	Minnetonka.	Scientific, II.
Locke, David Albert,	"	Scientific, I.
Locke, Joseph Henry,	St. Cloud.	Classical, III.
Locke, Samuel Allen,	Minnetonka.	Scientific, I.

Loy, George John,	Chaska.	Scientific, III.
McClure, Clarendon Parker,	St. Cloud.	Modern, II.
McCoy, Frank Wilber,	Zumbrota.	Scientific, III.
McGaughey, Margaret E.,	Minneapolis.	Modern, II.
McKasy, Thomas,	Le Sueur.	Scientific, III.
McMillan, Emily Dana.	Minneapolis.	Modern, II.
McNair, Benedict Poitiaux,	"	Scientific, III.
McNair, Sarah Pierrepont,	"	Modern, II.
Maes, Emma Ernestine.	"	Modern, Jun.
Marston, Anna Calista,	"	Modern, II.
Mathes, Edwin Howard,	Okaman.	Elm. Agr., III.
Merrill, Mary Frances,	Minneapolis.	Scientific, II.
Merriman, Orlando C., Jr.,	"	Scientific, II.
Miars, Ada Susan,	Champlin.	Modern, III.
Miller, Sarah Reubanna,	Parkesburg, Pa.	Scientific, III.
Mixer, Carrie Louise,	Unionville, O.	Special.
Montgomery, Frank Hugh.	St. Cloud.	Special.
Moore, Laura Belle,	Minneapolis.	Modern, II.
Morris, Evan,	Bristol.	Classical, II.
Morris, Thomas,	"	Classical, I.
Moulton, Amelia Christiana,	Monticello, Ia.	Scientific, III.
Moutoux, Charles Frederic,	Newport.	Classical, III.
Nachtrieb, Henry Francis,	Minneapolis.	Scientific, I.
Nix, Robert Peter Andrew.	New Ulm.	Scientific, Sen.

Nunn, Alexander Hamilton,	Claremont.	Classical, I.
Nunn, Janet.	"	Modern, II.
Olmsted, Gertrude Clara.	Duluth.	Modern, II.
Paine, Asa.	Minneapolis.	Scientific, III.
Palmer, Sarah Ellen.	Shell Rock.	Scientific, Jun.
Partridge, Earl.	Minneapolis.	Classical, I.
Pemberton, John.	St. Paul.	Special.
Perkins, Augusta Maria.	Minneapolis.	Modern, II.
Peters, William George.	"	Scientific, II.
Peterson, Albertine Virginia.	"	Scientific, III.
Phillips, Bradley, Jr..	Hudson, Wis.	Modern, I.
Pickett, Eli Milton Skiff.	Albert Lea.	Classical, I.
Pierce, Helen Louise.	Minneapolis.	Classical, II.
Pillsbury, Addie Eva.	"	Modern, I.
Pomeroy, John William, Jr..	"	Scientific, III.
Pound, Alice Emily.	Chippewa Falls.	Modern, III.
Pratt, Tracy Wilder.	Red Wing.	Scientific, II.
Prosser, Hamline Rasselas.	Spring Valley.	Scientific, I.
Radcliffe, Joseph Frederick.	Minneapolis.	Scientific, II.
Rankin, Albert William.	St. Peter.	Classical, Sen.
Reed, Albert.	Hastings.	Scientific, III.
Relf, Henry Clark.	Superior, Wis.	Classical, III.
Reynolds, Fred.	Crookston.	Modern, I.
Reynolds, Minnie Aurora.	"	Scientific, Sen.

Rhame, Edward Davison,	E. Rockaway, N. Y.	Scientific, II.
Richards, David,	Mankato.	Special.
Robinson, Garland Greene.	Kingston.	Special.
Roe, Alva Lucius.	Afton.	Scientific, Sen.
Rollit, Sarah Alice Sophia.	Minneapolis.	Special.
Rowell, Henry H. Sibley.	"	Scientific, II.
Rowley, Loron Thomas.	Oakland.	Classical, III.
Rowley, Quintin John,	"	Classical, Jun.
Sabin, Esther Augusta.	Monticello.	Scientific, III.
Salisbury, George Nelson.	Faribault.	Scientific, II.
Sanford, David, Jr..	St. Paul.	Classical, III.
Savidge, William Hines.	Cleveland.	Special.
Sawyer, Nettie.	Chatfield.	Classical, II.
Schmidt, Charles Christian.	Eyota.	Scientific, II.
Sheldon, Charles Hopkins,	Excelsior.	Scientific, II.
Sheldon, Frank Stewart.	"	Classical, III.
Sheldon, Martha Alma.	"	Classical, II.
Shenton, Willard Henry.	Minneapolis.	Modern, I.
Shumway, Edgar Edmund,	Wilmington.	Scientific, III.
Shumway, Herbert Paine.	"	Scientific, I.
Sidener, Charles Frederick.	Red Wing.	Special.
Smith, Frederick Addison.	St. Paul.	Special.
Smith, Fred. Wallace,	Minneapolis.	Classical, III.
Smith, Gilman Walter.	Red Wing.	Scientific, Sen.

Smith, Harriet Isabel.	Minneapolis.	Modern, II.
Smith, Harvey Page.	Red Wing.	Scientific, Sen.
Smith, Hettie Augusta.	Minneapolis.	Modern, I.
Smith, Louis Orville.	Le Sueur.	Scientific, II.
Snyder, Fred. Beal.	Minneapolis.	Classical, Jun.
Souther, Mary Ella.	Troy.	Special.
Stevens, Frederick Augustus.	St. Paul.	Classical, II.
Strong, Harry Amy.	Decorah, Iowa.	Modern, I.
Swett, Ella Augusta.	Minneapolis.	Modern, II.
Teel, Charles Seneca.	Eyota.	Classical, III.
Thompson, Clara Ella.	Minneapolis.	Special.
Thompson, Ellen Rebecca.	Spring Valley.	Scientific, II.
Thompson, John.	Minneapolis.	Classical, III.
Todd, Lillian Sanborn.	"	Scientific, Sen.
Townsend, Samuel Denton.	Pine Island.	Classical, III.
Trout, Hollis Cassius.	Springfield, O.	Special.
Trussell, Emma Frances,	Champlin.	Modern, II.
Trussell, Sumner Lincoln.	"	Classical, II.
Tupper, Wm. G. Wheeler,	Zumbrota.	Special.
Van Cleve, Carl Ernest.	Minneapolis.	Classical, III.
Van Nest, Robert.	Minneapolis Tp.	Special, Agr.
Vaughn, Zenas Newton.	Austin.	Scientific, III.
Ware, Emma Jane,	Brownsdale.	Scientific, II.
Washburn, Sanford Seth,	Blooming Prairie.	Special.

Webster, Charles Myron.	Red Wing.	Classical, I.
Welch, Herbert Nathan.	Winnebago Cy.	Scientific, III.
West, Alice Mary.	Minneapolis.	Modern, III.
West, Paul,	St. Cloud.	Special.
Whitney, Edward D. Neill.	Minneapolis.	Scientific, I.
Williams, Lillie Ruth.	Brooklyn.	Scientific, Jun.
Williams, Wm. Wadsworth.	Lime Springs, Ia.	Classical, Sen.
Wilson, Edith Belle.	Minneapolis.	Modern, II.
Wilson, Jesse Craig.	Dundas.	Classical, I.
Winterer, Herman.	Le Sueur.	Scientific, III.
Woodmansee, Blanche.	St. Paul.	Modern, II.
Woodmansee, Charles C.	"	Scientific, III.
Wright, Vernon Ames.	Minneapolis.	Scientific, III.
Wyman, Addie,	"	Special.
Young, Edward Theodore.	Arlington.	Scientific, II.
Zwinggi, Emma.	St. Peter.	Scientific, III.

ON LEAVE.

Alden, William Henry.	St. Cloud.	Scientific, III.
Bradford, William.	Maple Plain.	Scientific, III.
Bray, Newton James,	Norwood.	Scientific, III.
Brohough, Gustav Olsen.	Hay Creek.	Classical, III.
Brooks, Adin Pease,	Minneapolis.	Classical. Sen.
Cobb, Henry Ridgeway.	"	Classical, II.
Dexter, Laura Belle.	"	Modern, I.

Door, Norman Arthur,	Mankato.	Scientific, III.
Elwell, George Herbert,	Cottage Grove.	Classical, III.
Fleming, Calvin Albert,	Garden City.	Modern, II.
Foster, Fred Hascal,	Minneapolis.	Classical, Jun.
Foster, Scott Arthur.	Hyde Park.	Scientific, II.
Goodrich, Mary Ellen,	Minneapolis.	Special.
Haseltine, George Colby,	"	Scientific, II.
Healy, Peter Joseph,	Fountain.	Modern, II.
Hessian, Arthur,	St. Peter.	Scientific, III.
Hill, Helen Miriam,	Minneapolis,	Modern, III.
Holbrook, Frank Wayland,	Le Sueur.	Scientific, III.
Howard, George Franklin,	Rochester.	Scientific, III.
Linton, Sarah Virginia,	Cook's Valley.	Modern, I.
McNear, Nellie Frances,	Wiscasset, Me.	Modern, III.
Malchow, Charles William,	Minneapolis.	Scientific, III.
Manderfield, Anthony Albert,	New Ulm.	Special.
Moses, William Elias,	Northfield.	Scientific, III.
O'Leary, Bridget Isabella,	Mendota.	Scientific, III.
Pardee, Mary Alice,	Minneapolis.	Modern, III.
Pound, Charles Lord,	Owatonna.	Scientific, II.
Roberts, Thomas Sadler,	Minneapolis.	Scientific, Jun.
Rowley, Henry Ward,	Farmington.	Scientific, III.
Smith, George Babcock,	St. Cloud.	Special.
Spooner, Elizabeth Emma,	Minneapolis.	Modern, III.

Town, Eva,	Owatonna.	Modern, I.
Tupper, Edward Augustus,	Zumbrota.	Special.
Waite, Harriet Mary,	Byron.	Classical, III.
Weeks, Edith Vincent,	Minneapolis.	Modern, III.

SUMMARY-1879-80.

COLLEGE OR DEPARTMENT.	CLASS.	Gentlemen	Ladies.	TOTALS.
SCIENCE, LITERATURE AND ARTS. - - -	Senior.	13	6	19
	Junior.	12	7	19— 38
MECHANIC ARTS. - - - - -	Senior.	..	..	1
	Junior.	1	..	1— 2
	Special.	1	..	1— 2
AGRICULTURE. - - - - -	El. Course.	1	..	1
	Special.	1	..	1— 2
COLLEGIATE DEPARTMENT. - - - - -	I.	39	19	58
	II.	37	25	62—120
	III.	78	30	108—108
	Special.	28	10	38— 38
TOTALS. - - - - -		211	97	308

OR BY CLASSES ONLY.

SENIORS—OF ALL DEPARTMENTS. - - - - -	19
JUNIORS—OF ALL DEPARTMENTS. - - - - -	20
SOPHOMORES—COLLEGIATE DEPARTMENT. - - - - -	58
FRESHMEN— " " " " - - - - -	62—159
SUB-FRESHMAN— " " " " - - - - -	108—108
SPECIAL AND AGRICULTURAL. - - - - -	41— 41
TOTAL. - - - - -	308

THE UNIVERSITY.

HISTORICAL.

In the act creating the Territory of Minnesota, approved March 3d, 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."

—*Constitution, Article VII., Section 4.*

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 and 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.

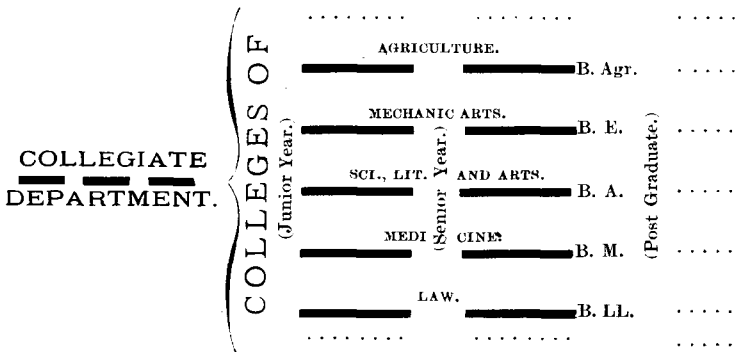
GENERAL PLAN.

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 position of these colleges or departments is 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 the introduction of optional studies, and for certain professional or technical courses. 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.

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 the 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, the Board of Regents have from time to time enacted such by-laws as seemed to be necessary. 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 further examined in all 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. Students of any department or college may elect studies of another department, under the direction of the faculties or professors.

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

9. 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.

10. The term programmes are arranged according to the wants

of the regular students. Special students must select (in equivalent amounts) from the studies thus laid down.

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.

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

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

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 MASTERS' 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. Political 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.	5. History.
2. Science (theoretical).	6. A language, ancient or modern.
3. Philosophy.	7. Philology.
4. Political Science.	
2. A thesis on a scientific subject.

MASTER OF LITERATURE.

1. A satisfactory examination,
 - (a) upon two modern authors. [German or French.]
 - (b) upon any three distinct subjects selected from the following branches :

1. Mathematics, pure or applied.	5. History.
2. Science, natural or physical.	6. A language, ancient or modern.
3. Philosophy.	7. Philology.
4. Political Science.	
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 the 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 AGRICULTURE.

The degrees of CIVIL ENGINEER, MECHANICAL ENGINEER and ARCHITECT, will be conferred upon Bachelors of Civil Engineer-

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

The following rules 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 application 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.	5. History.
2. Science, natural or physical.	6. A language, ancient or modern.
3. Philosophy.	
4. Political Science.	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. | 5. History. |
| 2. Science, natural or physical. | 6. A language, ancient or modern. |
| 3. Philosophy. | 7. Philology. |
| 4. Political Science. | |
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. | 5. History. |
| 2. Science, natural or physical. | 6. A language, ancient or modern. |
| 3. Philosophy. | 7. Philology. |
| 4. Political Science. | |
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. | Astronomy. |
| 2. Chemistry. | |
| 3. Physics. | |
| 4. Botany. | |
| 5. Zoology. | Biology. |
| 6. Geology. | Mineralogy. |

7. English Language and Literature. Rhetoric.
 8. German Language and Literature.
 9. French Language and Literature.
 10. Latin Language and Literature. Roman History and Antiquities.
 11. Greek Language and Literature. Greek History and Antiquities.
 12. Mental and Moral Philosophy. History of Philosophy, Logic.
 13. History.
 14. Political Science. International Law. History of Civilization. Comparative Philology.
 15. Elocution and Vocal Culture.
 16. Public Health.
 17. Industrial Drawing. Descriptive Geometry.
 18. Fine Arts. Æsthetics.
- II. PROFESSIONAL. *Associated Subjects.*
19. Theory and Practice of Agriculture. Horticulture and Arboriculture, Veterinary Science. Stock-breeding, &c.
 20. Civil Engineering.
 21. Mechanical Engineering.
 22. Architecture.
 23. Military Science. Gymnastics.
 24. Education.
 25. Business.
 26. Music.

The following consolidations and assignments are now in force:

1. Physics is attached to the department of Mechanical Engineering.
2. Botany, Zoology and Biology are in charge of the Professor of Geology.
3. History is attached to the department of Mental and Moral Philosophy.
4. Elocution and Vocal Culture are in charge of the Professor of English.
5. Public Health is in charge of the Secretary of the State Board of Health.
6. Industrial Drawing and Descriptive Geometry are in charge of the Professor of Mechanical Engineering.

7. No instruction is offered in Fine Arts, or Business.
8. Civil Engineering and Architecture are attached to the department of Mechanical Engineering.
9. In the department of Education an annual course of lectures on the Theory and Practice of Teaching will be offered.
10. Instruction in Vocal Music will be offered once a week.

The following statements, by the several professors now in charge, show the nature and scope of the work in the various departments. These statements should be carefully examined by students and applicants in connection with the courses of study as tabulated further on:

I. MATHEMATICS AND ASTRONOMY.

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 Conic Sections; 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 Cubic 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 princi-

ples 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 problem 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 celestial sphere. The Conic Sections are treated in the Geometrical method before taking up Analytical Geometry.

The studies thus far named are required in the Collegiate Department of all regular students; the remaining ones are elective to all students in the Junior and Senior years, as follows :

- Analytical Geometry in the first term Junior:
- Differential Calculus in the second term Junior:
- Integral Calculus in the third term Junior:
- Astronomy, Descriptive, in the first term Senior:
- Astronomy, Practical, in the third term Senior.

Seniors are at liberty to elect the Mathematics of the Junior year if the programme will allow.

II. CHEMISTRY.

PROFESSOR PECKHAM.

During the first term sub-Freshman year the students in the Scientific Course are required to take Elementary General Chemistry. The work gone over is embraced in Barker's Chemistry as far as through Carbon, omitting the Stoichiometry and Problems; or some equivalent work.

In the Freshman year the same students take in the third term the lectures on Applied Chemistry, and in the first term of the Sophomore year they take

lectures on the Historical Development of Theoretical Chemistry, Stoichiometry and Problems.

This work, embracing three terms, prepares the Scientific students for their term of required work in Qualitative Analysis in the second and third terms of the Sophomore year, and the elective work of the Junior and Senior years in problems of Quantitative Analysis and Research.

The Classical and Modern students are required to take in the third term of the Freshman year substantially the same work as has been outlined for the Scientific section in the first term of the sub-Freshman year.

Scientific students of the Sophomore Class take Analytical Chemistry three times per week the second term, and twice per week the third term. Students in all courses can elect Analytical Chemistry during the whole or a part of the Junior and Senior years.

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

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.

III. PHYSICS.

A thorough knowledge of the elements of Natural Philosophy is expected on entrance, of all scientific students, and is recommended to others.

Molecular Physics is begun by the Scientific Section of the Freshman class in the second term, and is continued by the same students during the first term of the Sophomore year. Classical and Modern students go over a general course in Physics in the first term of the Sophomore year.

In the first term Junior, Mechanics is required of all Scientific and Engineering students, and is elective to others. In the second term of the Senior year Engineering students are required and others are allowed to pursue an advanced course of study in the Physical Laboratory, making their own experiments and constructing or adapting their own apparatus in the workshop.

IV. BOTANY.

PROFESSOR HALL.

The students of the Classical and Modern Courses are required to take Botany in the third term of Freshman year. The text-book used is Gray's Lessons and Manual. So much of the elements of Structural and Systematic Botany as can be gone over in a single term is given to the students of these courses. An herbarium of fifty specimens, neatly preserved and correctly labeled, is expected of each student in addition to the class-room work.

In the third term, Sub-Freshman year, the Scientific students take substantially the same course as is indicated above for the Classical and Modern Courses.

In the third term, Freshman year, an advanced course in Botany will be given to the Scientific students. Its object will be to give a more thorough knowledge of Structural and Physiological Botany, and more skill in plant analysis. It is intended, also, to take up Economic Botany, and to offer facilities for work in the Laboratory, in the dissection of plants and the use of the microscope. The instruction will be made as practical as possible. An herbarium of seventy-five specimens will be expected of each student, and those collected the preceding year may be counted.

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.

V. ZOOLOGY.

PROFESSOR HALL.

The course in Zoology consists of one term's work required in the third term Sophomore year of the Scientific Course, and another term's work, elective, in the first term Junior year.

The required term's work consists of a comparative study of the whole animal kingdom. Structural affinities are studied, and an examination made into the mechanical principles on which animal bodies are constructed, and into the ways and means by which the various functions of life are carried on. A careful consideration of these subjects leaves but little time for the study of classification. A good and constantly increasing collection of specimens, belonging to the General Museum, is in daily use to illustrate the different topics as they are taken up in the class-room.

Following this short and general course, there is offered in the first term Junior year, an elective course in Principles of Classification, Embryology and Comparative Anatomy. Recitations, lectures and laboratory work will give the student a practical, as well as a theoretical, knowledge of the science. Nothing like a complete course is aimed at; the vertebrates will be more specially studied. The work taken up and the methods used will be such that the student who desires the elements of Comparative Anatomy as the basis for his preparation for a professional life, or who desires to pursue his studies as an amateur in this rapidly developing field of Natural History will have a substantial starting point from which to advance.

VI. MINERALOGY AND GEOLOGY.

PROFESSOR HALL.

The Junior class takes up Mineralogy in the winter term. This is a required subject for the Scientifics, and an elective one for the Classics and Moderns. There is a lecture daily, and an equal amount of time is allotted each week to laboratory work.

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 characters 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 most frequently occurring crystal forms from models and a good working collection of minerals, accompanying a course in Quantitative Blowpipe Analysis.

In the Senior year, there is a course in General Geology. The effort will be made to adapt the course to the wants of students who have but the limited time of a single term to devote to the subject.

The aim here is to bring out the succession of leading events in the geological history of the earth, in a series of recitations and lectures, in which statements of theories will be so introduced that they will show something of the historical development of the science.

In the following term there will be offered a series of lectures in Economic Geology. In this course will be discussed the relations of Geology to Mining, and the origin and position of some of the most remarkable deposits of native elements and ores; to Architecture, as in building materials, ornamental stones, &c.; and to the formation and constitution of soils.

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 Marcy's Scaopticon 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. By means of these collections, exchanges are being made so that specimens from all the great formations, as they appear in different localities, can be compared, and their resemblances and differences brought before the student. It is hoped that these exchanges may be yet greatly increased. Correspondence and contributions of any kind, if of interest to Science and of value to the students, are solicited, and may be addressed to the Professor in charge. 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: Text-book of Mineralogy, E. S. Dana; Determinative Mineralogy and Blowpipe, Brush; Manual of Geology, Dana; Elements of Geology, Le Conte.

VII. ENGLISH LANGUAGE AND LITERATURE.

PROFESSOR MARSTON.

COLLEGIATE DEPARTMENT.

SUB-FRESHMAN CLASS.

- 1st Term—Grammar and Analysis, with the study of selections from American authors. Royse's American Literature is used as a text-book, and references are made to the various standard Grammars; Exercises in writing.
- 2d Term—Selections from Addison and Goldsmith (Hudson's) are studied with special reference to the structure of sentences and paragraphs, and to the use of figurative language; Exercises in writing.
- 3d Term—Scott's Marmion, Select Poems of Wordsworth (Hudson or Arnold), or the speeches of Burke (Hudson), studied as to matter and style; Exercises in writing.

FRESHMAN CLASS.

- 1st Term—Abbott's "How to Write Clearly," with practice in composition and in the criticism of periodical literature in respect to clearness and precision of style.
- 2d Term—Milton's Paradise Lost (Books I. and II.), or minor poems, studied with reference to diction, derivation of words, figurative language, classical allusions, etc.; Exercises in writing.
- 3d Term—The English of Shakspeare (Rolfe), with Abbott's Shakspearian Grammar; English versification; Exercises in writing.

SOPHOMORE CLASS.

- 1st Term—History of the English Language (Lectures of Loumsbury), with Chaucer.
- 2d Term—Anglo-Saxon.
Rhetoric for all courses.

UNIVERSITY CLASSES.

JUNIOR CLASS.

3d Term—History and Philosophy of English Literature. Lectures.

SENIOR CLASS.

1st Term—The Criticism of English and American Orators. Goodrich's British Eloquence is used as a text-book.

3d Term—Lectures on Criticism and Recent Literature.

RHETORICAL EXERCISES.

In the three lower classes, the students of all departments are required to perform such rhetorical work as the Faculty may prescribe. The exercises consist of declamations, essay writing, etc.

JUNIORS (of all departments) are each required to give three essays and three orations during the year. Each oration is carefully criticised, then re-written, and, when approved, rehearsed in private, and then presented in public to the students and faculty.

SENIORS (of all departments) are each required to have two essays and three orations, including Commencement part.

VIII. GERMAN LANGUAGE AND LITERATURE.

PROFESSOR MOORE.

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. Students of the Classical and Scientific Courses may commence German in the Junior year.

The course is as follows :

First Year (Sub-Freshman Class.)

1st Term—Comfort's German Course.

2d Term—Comfort, continued, and Whitney's Grammar and Reader.

3d Term—Comfort, and Whitney's Grammar and Reader completed.

Second Year (Freshman 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.

IX. FRENCH LANGUAGE AND LITERATURE.

PROFESSOR MOORE.

COLLEGIATE DEPARTMENT.

In the Sophomore 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—Fasquelle's French Course.

2d Term—Fasquelle continued, and Knapp's French Reading Book; 70 pages selections in prose and verse.

3d Term—Fasquelle completed; Knapp's French Reading Book.

COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

French is elective to all students throughout the Senior Year.

The work of the present year has been as follows:

1st Term—Dramatic Literature, (3 Dramas); *Bourgeois Gentilhomme*, (*Molière*): *Phædre*, (*Racine*): *Zaire*, (*Voltaire*).

2d Term—Classical Prose (150 pages): selections from *Fenelon*, *Rousseau*, *Guizot*, *Chateaubriand*, *Montesquieu*, etc.

3d Term—Philosophical French: *Taine's "Philosophie de l'Art,"* &c.

X. LATIN LANGUAGE AND LITERATURE.

PROFESSOR TRIPP.

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 orders 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, Horace (6 weeks), Latin Prose Composition, Roman History and Antiquities.

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

The Juniors have Oratory, Philosophy and 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.

In pronouncing the diphthongs the sound of both vowels is preserved:

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

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*; *r* like *English e* or like *ou* in *oui* in French.

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.

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

XI. GREEK LANGUAGE AND LITERATURE.

PROFESSOR BROOKS.

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 and 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 acts 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.

XII. MENTAL AND MORAL PHILOSOPHY, &c.

PROFESSOR CAMPBELL.

MENTAL PHILOSOPHY.—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 Ontology, 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.

MORAL PHILOSOPHY.—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 time is devoted to essays, recitations 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.

COMPARATIVE PHILOLOGY.—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.

FINE ARTS.—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.

XIII. HISTORY.

PROFESSORS CAMPBELL AND MARSTON.

COLLEGIATE DEPARTMENT.

Applicants for admission are examined in the History of the United States, and in the outlines of General History. A thorough knowledge of so much of the subject as is contained in Swinton's Condensed History of the United States, is required. Of General History is required so much as is contained in Swinton's Outlines.

The following is the scheme of Historical studies:

SUB-FRESHMAN CLASS—Ancient History, the first term, five times a week.

FRESHMAN CLASS—Mediæval History, the second term, twice a week.

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

COLLEGE OF SCIENCE, LITERATURE AND THE ARTS.

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

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.

XIV. POLITICAL 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.

Civil government is an elective for all Seniors 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.

In International Law a course of ten lectures is given to Seniors electing the subject in the second term.

The subject of Logic, heretofore attached to this department, now assigned to the department of Mental and Moral Philosophy, is elective for all Juniors in the second 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.

XV. ELOCUTION. See "English Language," &c., *supra*.*XVI. PUBLIC HEALTH.*

PROFESSOR HEWITT.

A course of lectures on Sanitary Science is offered to the Seniors of all departments the Second Term. The topics embraced are such as: Personal Hygiene, 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.

XVII. 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:

SUB-FRESHMAN CLASS.—During the second term the students learn the use of instruments, the principles of Geometrical Drawing, Tinting and Shading, and Elementary Projections.

FRESHMAN CLASS.—Projection drawing is continued a part of the first 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 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 Line 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.

XVIII. FINE ARTS.—SEE MENTAL AND MORAL PHILOSOPHY, &c., as above.

XIX. THEORY AND PRACTICE OF AGRICULTURE, &c., &c.
SEE COLLEGE OF AGRICULTURE.

XX. XXI. XXII. CIVIL ENGINEERING, MECHANICAL ENGINEERING, ARCHITECTURE.

SEE COLLEGE OF MECHANIC ARTS.

XXIII. 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 officers of the army as professors 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, and company and battalion drill parade, review and other ceremonies.

By action of the Board of Regents, military exercises are required of all male students in 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:

*University of Minnesota.**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:

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

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

Sophomore Class: Instruction in the duties of non-commissioned officers and officers.

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

EQUIPMENT.

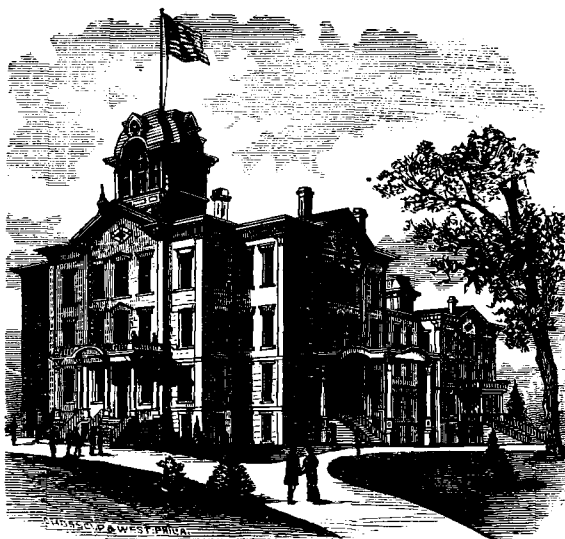
CAMPUS.

The University is situated in the 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 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.

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 1,200 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. For view of this building see College of Agriculture, *infra*.

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 the Professor of Chemistry.

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 an 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.—During the past year a laboratory has been fitted up for determinative work in Mineralogy. The room is furnished with three double tables accommodating eighteen students. Each table is provided with all the apparatus and reagents necessary for a complete series of blowpipe tests and for all the qualitative chemical work done in the determination of rocks and minerals.

Until the needs of the students of Biology for workrooms of their own have been met, the anatomical and botanical work pertaining to the instruction in Zoology and Botany will be done in this same room. Since the laboratory work in their respective studies comes in different terms, this arrangement can be carried out for the present without inconvenience.

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 specimens are contained, so far as they are ready for exhibition, in rooms 51 and 52 of the main University building. In the south room, No. 52, are the geological and mineralogical specimens, in cases suitably arranged about the room, the suite of typical Minnesota rocks and minerals being in the large case in the centre of the room. Upwards of 3,500 entries and 10,000 specimens, including duplicates, indicate the volume of this department of the Museum, embracing species not only from the State of Minnesota but from all parts of the world. Among these is a complete series of the zinc and iron minerals, and their associates, from Franklin, Ogdensburg and Bergen Hill, N. J.

In the north room, No. 51, are upright cases filled with zoological specimens. These embrace specimens of some of the larger mammals and fur animals of the Northwest, birds, marine invertebrates, alcoholic preparations, and a set of Prof. Ward's casts of fossils, including the *Megatherium Cuvieri*, On.

The Museum is rapidly growing in value by the accumulations of the Geological Survey of the State, and is constantly used for the illustration of scientific instruction. The rooms are open daily during the University year for the convenience and use of students and visitors.

Contributions and correspondence should be addressed to the Curator, Prof. N. H. Winchell.

The MUSEUM OF AGRICULTURE is designed to assist in illustrating the instruction in Agriculture and Horticulture. It comprises models of agricultural implements, seeds 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 are respectfully requested.

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.

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 Schrueder 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 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 numerous represented are Philology, 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., ex-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.

New Englander; North American Review.

MONTHLIES.

Blackwood's Magazine, American Agriculturist, Popular Science Monthly National Live Stock Journal, Gardner's Monthly and Horticulturist, Art Journal, Library Journal, Scribner's Magazine, Eclectic Magazine, Atlantic Monthly, Van Nostrand's Engineering Magazine, Contemporary Review, Fortnightly Review, Nineteenth Century, American Journal of Science and Arts, Annales de Chimie, Deutsche Revue, International Review, American Naturalist, Microscopic Journal.

WEEKLIES.

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

SEMI-WEEKLIES.

New York Evening Post, New York Tribune.

DAILIES.

Minneapolis Morning 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 Fourteenth 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. At the hour appointed for examinations you will receive a numbered examination ticket. By this number alone you will 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 expenses, receive a registration card, which admits them to the classes.

BOARDING.

THE UNIVERSITY HAS NO DORMITORIES, except for a few employes. 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 the 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, 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 \$300.00; those of students boarding in clubs and otherwise, about \$185.00.

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 8 o'clock A. M. and continues throughout the day. A general assembly of students and faculty is held each day at 10:45 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; but in all cases of offenses against peace and order committed by students of whatever department or college, the General Faculty has exclusive jurisdiction.

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 1879-80 is Professor G. Campbell, M. 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 customary 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 1879-80 are: Dr. S. P. STARRITT, president; Dr. H. C. LEONARD, secretary and treasurer; EUGENE A. HENDRICKSON, orator.

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 since 1872, 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 building 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.

FRUIT FARM ON MINNETONKA.

In the winter of 1878-9 the State Horticultural Society organized a movement intended to compliment and encourage in his further endeavors Mr. Peter M. Gideon, of Excelsior, Hennepin County, the well known discoverer of the Wealthy Apple. The result was an appropriation by the Legislature of \$2,000 for the purchase of land, and of \$1,000 per annum for the salary of a superintendent, the control of the establishment being placed in the hands of the Board of Regents. By good fortune a piece of land of the most favorable situation and exposure, lying on the peninsula dividing the upper and lower lakes of Minnetonka, was secured. Mr. Gideon was appointed Superintendent and has already begun extensive experiments.

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 1879-80.

I. SOPHOMORE CLASS.

CLASSICAL COURSE.—*Messrs.* Baldwin, O. W., Brooks, D. D., Gale, Gould, Hall, A. H., Hancock, Healy, F., Hilyer, Leavens, Morris, T., Nunn, Partridge, Pickett, Webster, Wilson.

Misses Brooks, O. E., Holt, C. W., Holt, L. R., Hughes, M. F.

SCIENTIFIC COURSE.—*Messrs.* Backus, G. J., Barnard, Barrett, Broughton, Clark, Cook, F. W., Heath, Jamison, Kennedy, J., Linton, Locke, D. A., Locke, S. A., Nachtrieb, Prosser, Shumway, H. P., Whitney.

Misses Burnes, Demmon.

MODERN COURSE.—*Messrs.* Dickerman, A. E., Johnson, R. H., Lang, H. D., Lang, W. A., Phillips, Reynolds, Shenton, Strong.

Misses Allen, Camp, Curtis, Dexter, Hendrickson, Henry, Holt, M. E., Hughes, M. N., Kilbourne, Linton, Pillsbury, Smith, H. A., Town.

II. FRESHMAN CLASS.

CLASSICAL COURSE.—*Messrs.* Cobb, Fay, Gaylord, Jones, W. H., Kerr, Lewis, G. W., Morris, E., Stevens, Trussell.

Misses Pierce, Sawyer, Sheldon.

SCIENTIFIC COURSE.—*Messrs.* Bell, Case, Foster, S. A., Gray, Haseltine, Haselquist, Hinds, G., Hoage, Johnson, F. A., Jones, E. C., Jones, R. S., Locke, C. M., Merriman, Peters, Pound, Pratt, Radcliffe, Rhame, Rowell, Salisbury, Schmidt, Sheldon, C. H., Smith, L. O., Young.

Misses Hollister, Merrill, Thompson, E. R., Ware.

MODERN COURSE.—*Messrs.* Dickerman, W. H., Fleming, Healy, P. J., McClure.

Misses Alden, Gould, Hayes, Jefferson, Kennedy, McGaughey, McMillan, McNair, Marston, Moore, Nunn, Olmsted, Perkins, Smith, H. I., Swett, Trussell, Wilson, Woodmansee.

III. SUB-FRESHMAN CLASS.

CLASSICAL COURSE.—*Messrs.* Adams, Baldwin, E. P., Boardman, Bowman, Brohough, Buckley, Donnell, Elwell, Greeley, E. H., Ham, Hill, F. D., Holt, A. G., Hutchinson, Jones, D. P., King, J. C. E., King, R. F., Lewis, J. R., Locke, J. H., Moutoux, Relf, Rowley, L. T., Sanford, Sheldon, F. S., Smith, F. W., Teel, Thompson, Townsend, Van Cleve.

Misses Brooks, A. E., Waite.

SCIENTIFIC COURSE.—*Messrs.* Alden, Anderson, G. W., Anderson, J., Backus, E., Baker, Barr, Bondurant, Bradford, Bray, Chute, Clarke, Dart, Donohue, Door, Drake, Fellows, Fitzgerald, Foster, F. P., Hendrickson, Hessian, A., Hessian, J., Hill, F. W., Hinds, W., Holbrook, Howard, Johnson, A., Klepper, Kuhlman, Lambert, Larson, Lewis, G. J., Loy, McCoy, McKasy, McNair, Malchow, Moses, Paine, Pomeroy, Reed, Rowley, H. W., Shumway, E. E., Vaughn, Welch, Winterer, Woodmansee, Wright.

Misses Alexander, J. A., Alexander, M. E., Elwell, Folwell, Heath, Lawrence, C. E., Laythe, Miller, Moulton, O'Leary, Peterson, Sabin, Zwinggi.

MODERN COURSE.—*Messrs.* Baldwin, A. M., Bullis, Hughes.

Misses Aiton, Bradford, Burrill, Clough, Gallagher, Hathaway, Hill, Lawrence, A. L., McNear, Miars, Pardee, Pound, Spooner, Weeks, West.

SPECIAL STUDENTS.

Men. *Bonniwell, Brown, Buell, Catherwood, *Chambers, Cleveland, Cook, C. A., Eastwood, Gilman, Hall, P. M., *Harrington, Hayward, Kearney, *Kennedy, P., *Manderfeld, *Montgomery, *Pemberton, *Richards, Robinson, *Savidge, Sidener, *Smith, F. A., *Smith, G. B., Trout, Tupper, E. A., Tupper, W. G. W., Washburn, West.

Women. *Bonniwell, *Fletcher, Hale, *Harrington, Mixer, *Rollit, Souther, *Thompson, C. E., Wyman.

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 COLLEGE OF AGRICULTURE and MECHANICS 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, 1878 and 1879, in several cities and villages of the State. Similar examinations will be held hereafter. For programme see Appendix.

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

I.

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

I. Required for any and all courses:

1. ENGLISH LANGUAGE.—Including Spelling, Writing, and the elements of English Grammar and Composition. Such a knowledge of Etymology and the ordinary constructions of Syntax as may be obtained from the school grammars of Quackenbos, Harvey, Swinton or Greene is expected, and so much of English Composition as may be obtained from Hart's Introduction, Swinton, or equivalent.
2. MATHEMATICS.—A thorough knowledge of Arithmetic, from such treatises as those of Robinson, Ray, Olney, etc. The whole of Elementary Algebra, as contained in Olney's or Robinson's, or equivalent. Plane Geometry, from Olney's, Wentworth's, or any equivalent work. to Areas and Proportions of Figures.
3. GEOGRAPHY.—So much as is contained in Colton's or Cornell's Common School Geographies, or any equivalent works.
4. HISTORY.—The History of the United States, as contained in the text books of Quackenbos, Anderson, or their equivalent. The outlines of General History as contained in Swinton, or equivalent.
5. PHYSIOLOGY.—The elements of Human Physiology, as given in Dalton's Physiology, or equivalent.
6. ENGLISH OR LATIN.—[N. B.—The applicant elects between English and Latin.] The requirement in English is English Grammar complete, including Analysis as contained in the best school grammars. In Latin the requirement is Latin Grammar and Reader—Harkness's, or Allen & Greenough's.

II. Required in addition for each course:

1. FOR THE CLASSICAL COURSE.—Greek Grammar (Hadley's), and Lessons in Greek (Boise's), or Goodwin and White instead.

Cæsar: Three books of Cæsar's Commentaries—Harkness's or Allen & Greenough's.

Cicero: Two Orations—Harkness's or Allen & Greenough's.

2. FOR THE SCIENTIFIC COURSE.—Physical Geography, as contained in Warren's or Guyot's, or equivalent.

Natural Philosophy, as contained in Peck's Ganot, Avery's, Norton's, or equivalent.

Elementary Astronomy, as contained in Lockyer's, or equivalent.

English Composition, as contained in Hart's larger work, or equivalent.

English Word Analysis, as contained in Swinton's, or equivalent.

English History, as contained in Freeman's Old English History; or, in lieu of the last three, the same Latin as above for the Classical Course.

3. FOR THE MODERN COURSE.—English Composition, as contained in Hart's larger work, or equivalent.

English Word Analysis, as contained in Swinton's, or equivalent.

English History, as contained in Freeman's Old English History; or, in lieu of the last three, the same Latin as above for the Classical Course.

Cæsar: Three books—Harkness's, or Allen & Greenough's.

Cicero: Two Orations—Harkness's, or Allen & Greenough's; or, in lieu of the last two, the scientific studies as above for the Scientific 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.

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.:

English Language (as above), Arithmetic and Elementary Algebra, Geography and United States History.

II.

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

The attention of applicants for admission to the Freshman Class is called to the following resolutions of the Board of Regents, adopted May 4, 1880:

Resolved, In order further to encourage the high schools and academies of the State to prepare students to enter the Freshman class, and to lighten the burden of entrance examinations, that whenever any principal or superintendent shall certify that in his judgment any candidate is well prepared for admission to the FRESHMAN CLASS, furnishing at the same time a certified statement of the applicant's standing in all the studies required for admission to the course chosen, then the said applicant shall be excused from all examinations except upon the work of his course in the Sub-Freshman class.

Resolved, That the General Faculty shall make such regulations as may be deemed necessary to give the foregoing resolutions effect.—p. 202.

Applicants for the SOPHOMORE CLASS will be further examined in the studies of the chosen courses in the Freshman 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, 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 languages they will respectfully 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.”

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

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.

For the scheme of rhetorical exercises in this Department now in force, see page 49; for that of the military exercises, see page 57.

As explanatory of the tables which are necessarily compendious, the statements of the professors, under the head of "Instruction," on pages 41 to 58, should be carefully read by students and applicants for admission.

First Year—SUB-FRESHMAN CLASS, (III.)

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Greek,— <i>Xenophon</i> .	1. Chemistry,— <i>Elements</i> .	1. German, (<i>begun</i> .)
	2. History.— <i>Ancient</i> .	2. History,— <i>Ancient</i> .	2. History,— <i>Ancient</i> .
	3. Latin,— <i>Cicero</i> .	1. English,— <i>Am. Auth- ors, &c.</i> , or Latin,— <i>Cicero</i> , or German, (<i>begun</i> .)	3. English,— <i>Am. Auth- ors, &c.</i> , or Latin,— <i>Cicero</i> .
II.	1. Greek,— <i>Xenophon</i> .	1. Drawing, (10 hours.)	1. German,— <i>Continued</i> .
	2. Algebra.	2. Algebra.	2. Algebra.
	3. Latin,— <i>Virgil</i> .	3. English,— <i>Addison &c.</i> or German, (<i>continued</i>) or Latin,— <i>Virgil</i> .	3. English,— <i>Addison &c.</i> or Latin,— <i>Virgil</i> .
	4. Drawing,— <i>Optional</i> . (5 hours.)		4. Drawing, <i>Optional</i> . (5 hours.)
III.	1. Greek,— <i>Xenophon</i> .	1. Botany,— <i>Elements</i> .	1. German,— <i>Selections</i> .
	2. Geometry, (<i>completed</i>)	2. Geometry, (<i>completed</i>)	2. Geometry, (<i>completed</i>)
	3. Latin,— <i>Virgil</i> .	3. English,— <i>Scott &c.</i> , or German,— <i>Selections</i> , or Latin,— <i>Virgil</i> .	3. English,— <i>Scott, &c.</i> , or Latin,— <i>Virgil</i> .

Second Year—FRESHMAN CLASS, (II.)

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Greek.— <i>Homer</i> . 2. Higher Algebra. 3. Latin.— <i>Livy</i> .	1. Draughting, (10 hours) 2. Higher Algebra. 3. English, <i>Abbott</i> , or German,— <i>Lessing</i> , or Latin,— <i>Livy</i> .	1. German,— <i>Lessing</i> . 2. Higher Algebra. 3. English, or Latin,— <i>Livy</i> .
II.	1. Greek.— <i>Homer</i> . 2. Trigonometry, &c. (3) History,— <i>Medieval</i> . (2) 3. Latin.— <i>Livy</i> .	1. Physics,— <i>Sound and Heat</i> . 2. Trigonometry, &c. (3) History,— <i>Medieval</i> . (2) 3. English, <i>Milton</i> , or German,— <i>Schiller</i> , or Latin.— <i>Livy</i> .	1. German,— <i>Schiller</i> . 2. Trigonometry, &c. (3) History,— <i>Medieval</i> (2) 3. English, or Latin,— <i>Livy</i> .
III.	1. Greek,— <i>Selections</i> . 2. Botany,— <i>Elements</i> . 3. Gen. Chemistry, (<i>begun.</i>) 4. Surveying.— <i>Optional</i> .	1. Gen. Chemistry, (<i>continued.</i>) 2. Botany, (<i>continued.</i>) 3. English, <i>Shakspeare</i> , or German,— <i>Goethe</i> . 4. Surveying, <i>Required</i> .	1. German,— <i>Goethe</i> . 2. Botany,— <i>Elements</i> . 3. Gen. Chemistry, (<i>begun.</i>) 4. Surveying, <i>Optional</i> .

Third Year—SOPHOMORE CLASS, (I.)

Term	CLASSICAL COURSE.	SCIENTIFIC COURSE.	MODERN COURSE.
I.	1. Latin,— <i>Horace</i> . 2. Physics (<i>begun</i>). 3. English,— <i>Lounsbury</i> , or French (<i>begun</i>).	1. Applied Chemistry. 2. Physics (<i>continued</i>). 3. English,— <i>Lounsbury</i> , or French (<i>begun</i>), or Latin,— <i>Horace</i> .	1. French (<i>begun</i>). 2. Physics (<i>begun</i>). 3. English,— <i>Lounsbury</i> , or Latin,— <i>Horace</i> .
II.	1. Greek,— <i>Oratory</i> . 2. Rhetoric. 3. English,— <i>Anglo-Saxon</i> or French (<i>continued</i>).	1. Descriptive Geome- try (10 hours). 2. Rhetoric. 3. English,— <i>Anglo-Saxon</i> or French (<i>continued</i>). 4. Analytical Chemistry (6 hours.)	1. French (<i>continued</i>). 2. Rhetoric. 3. English,— <i>Anglo-Saxon</i>
III.	1. Greek,— <i>Tragedy</i> . 2. Conic Sections, (3) History,— <i>Modern</i> , (2) 3. Latin,— <i>Tacitus</i> .	1. Zoology. 2. Conic Sections, (3) History,— <i>Modern</i> , (2) 3. English,— <i>Anglo-Saxon</i> or French (<i>continued</i>), or Latin,— <i>Tacitus</i> . 4. Anal. Chemistry, (4 h)	1. French (<i>continued</i>). 2. Conic Sections, (3) History,— <i>Modern</i> , (2) 3. English,— <i>Anglo-Saxon</i> or Latin,— <i>Tacitus</i> .

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

1. The members of the Sub-Freshman Class, and all students lately admitted, are required to attend courses of lectures, as follows: (1) on the use of the Library and their relations to the University, to be delivered by the President, in alternate weeks, during the first term of each year; (2) on Books and Reading, by the professor of English, in alternate weeks during the second term; (3) on Health and Hygiene, by the non-resident professor of Public Health, in alternate weeks during the third term.

2. 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 more studies and exercises, or may allow an additional study or exercise. Unless otherwise specially provided, all such indulgences cease with the term.

3. Applications for a change of course, to drop a study, or 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 be allowed only at the beginning of the year.

EXAMINATIONS.

1. 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.

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

3. 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.

4. 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.

5. 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.

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

7. 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.

REGULATIONS.

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

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

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

4. 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.

5. 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.

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

7. 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.

8. 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,	TRIPP,
PECKHAM,	HALL,
The President.	

STUDENTS, 1879-80.

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.* BROOKS, A. P., BRYANT, J. F., RANKIN, WILLIAMS.
Misses BROWN, KNOX.

SCIENTIFIC COURSE.—*Messrs.* BERRY, GREELEY, H. B., HERRICK, NIX, ROE,
SMITH, G. W., SMITH, H. P.

Misses REYNOLDS, TODD.

MODERN COURSE.—*Messrs.* HOLT, A., HORTON.

Misses HOUSE, LAWRENCE.

JUNIOR YEAR.

CLASSICAL COURSE.—*Messrs.* AITON, ANDERSON, S. G., BRYANT, W. C., CHOWEN,
FOSTER, F. H., KENT, KING, W. L., ROWLEY, Q. J., SNYDER.

SCIENTIFIC COURSE.—*Messrs.* GRIMES, JENNISON, ROBERTS.

Misses PALMER, WILLIAMS.

MODERN COURSE.—*Misses* CAMPBELL, CRAFTS, GRIMES, KREIS, MAES.

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. There are in general in each course fifteen hours per week of recitations and lectures, besides rhetorical and other exercises not shown in the schedules.
2. There are five hours per week of prescribed, and at least ten of optional or elective work.
3. The required studies of any two courses are electives with reference to the third course.

JUNIOR YEAR.

1ST TERM—*Required.*

- In the Classical Course: Greek—*Philosophy.*
 In the Scientific Course: Physics—*Mechanics.*
 In the Modern Course: German—*Goethe.*

Elective.

History of Civilization (3), Comparative Philology (2), Analytical Geometry, Analytical Chemistry, Zoology.

2D TERM—*Required.*

- In the Classical Course: Latin—*Comedy.*
 In the Scientific Course: Mineralogy.
 In the Modern Course: German—*Lessing.*

Elective.

Logic, Differential Calculus, Analytical Chemistry.

3D TERM—*Required.*

English Literature, in all the courses.

Elective.

Psychology, Integral Calculus, Analytical Chemistry, Latin (*Philosophy*), German (*Literature*).

SENIOR YEAR.

1ST TERM—Required.

Geology, in all the courses.

Elective.

History of Philosophy, English Criticism, Analytical Chemistry, Astronomy, French.

2D TERM—Required.

Ethics, in all the courses.

Elective.

Civil Government, French, Analytical Chemistry (4), Economic Geology (4), Sanitary Science (1), International Law (1).

3D TERM—Required.

Political Economy, in all the courses.

Elective.

Practical Astronomy, French, Analytical Chemistry, English Literature (3), Natural Theology (2), Anthropology (1).

The instruction closes with the tenth week of the term; the examination takes place in the eleventh.

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

4. Seniors are allowed to elect the mathematics of the Junior year.

5. Classical and Scientific students who have not previously had French, can begin 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 36.

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 merits 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.

*NOTE—Analytical Chemistry and laboratory work in general require double hours.

THE COLLEGE OF MECHANIC ARTS.

THE COLLEGE OF MECHANICAL ARTS.

FACULTY.

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

STUDENTS, 1879-80.**MECHANICAL ENGINEERING.**

Junior Year, MR. BARDWELL. Special, MR. BREWIS.

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.

COURSE 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.

The third study 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."

For rhetorical exercises see page 49.

I. MECHANICAL ENGINEERING.

JUNIOR YEAR.

- 1st Term—1. Physics—Mechanics.
 2. Analytical Geometry.
 3. History of Civilization (3), and Comparative Philology (2),
or other elective.
- 2d Term—1. Mechanics, with Drawing.
 2. Differential Calculus.
 3. Mineralogy, *or other elective.*
- 3d Term—1. Motors and Stereotomy.
 2. Integral Calculus and General Theory of Equations.
 3. English Literature, *or other elective.*

SENIOR YEAR.

- 1st Term—1. Machinery, with Drawing.
 2. Applied Mechanics.
 3. Geology, or Astronomy.
- 2d Term—1. Engineering Structures.
 2. Practical Physics.
 3. Civil Government, *or other elective.*
- 3d Term—1. Building Materials.
 2. Practical Astronomy.
 3. Political Economy, *or other elective.*

II. CIVIL ENGINEERING.

This course coincides with the above except as follows:

1. In the third term of the Junior year Higher Surveying and Stereotomy are given instead of Motors and Stereotomy.
2. In the first term of the Senior year Field Engineering (Railway work, etc., with Drawing) is given instead of Machinery with Drawing.

III. ARCHITECTURE.

This course coincides with that in Mechanical Engineering except as follows:

1. In the third term of the Junior year the History of Architecture and Stereotomy are given instead of Motors and Stereotomy.

2. In the first term of the Senior year Agricultural Designing is given in lieu of Machinery with Drawing.

GRADUATIONS.

Students completing the foregoing courses to the satisfaction of the Faculty are entitled respectively to receive the appropriate baccalaureate degrees, to wit: Bachelor of Civil Engineering, Bachelor of Mechanical Engineering, Bachelor of Architecture.

For second degrees see page 38.

Special students receive certificates for successful examinations in the branches pursued. Any person is entitled to undergo examination in any subject, at convenient times; 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 Schroeder, 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 all the work of locating a railroad line, from the preliminary survey up to the point of actual construction.

REGULATIONS.

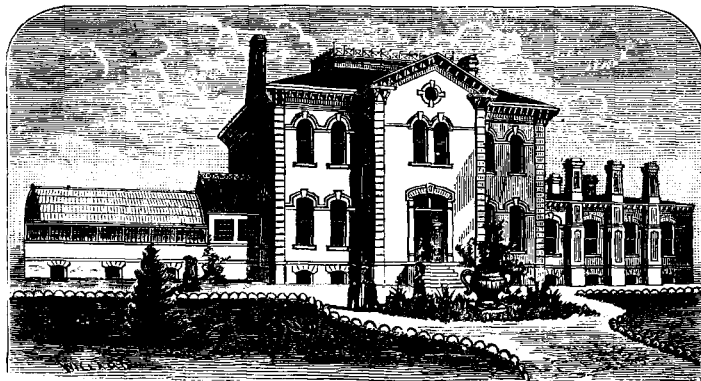
Students of this college are expected to attend the morning assembly, and are required to be present when appointed to deliver public rhetoricals.

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 fifteen 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 BUILDING.

THE FACULTY.

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

STUDENTS, 1879-80.

Elementary Course, MR. MATHES. Special, MR. VAN NEST.

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 Surveyors' instruments.

(8.) The Plant House. 24x84 feet, supplying plants and flow-

ers 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 1879. 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: method 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 classifications 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: selections and purchase of farms; the situation, relative position, size, and internal management 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*; Harris, on *The Pig*; Gamgee's *Domestic Animals in Health and Disease*; Stonehenge's *The Horse in the Stable and the Field*; Law's *Farmers' Veterinary Adviser*; Waring's *Handy Book of Husbandry*.

I. THE REGULAR UNDERGRADUATE COURSE.

JUNIOR YEAR.

- 1st Term—1. Composition and Physiology of Plants, "How Crops Grow."
 2. Horticulture.
 3. Mechanical Physics, *or other elective*.
- 2d Term—1. Agricultural Chemistry.
 2. Meteorology and Climatology.
 3. Mineralogy, *or other elective*.
- 3d Term—1. Atmosphere and Soils, "How Crops Feed."
 2. Horticulture.
 3. Psychology, *or other elective*.

SENIOR YEAR.

- 1st Term—1. Practical Agriculture, "Soils and Fertilizers."
 2. Comparative Anatomy and Physiology.
 3. Geology, *or other elective*.
- 2d Term—1. Practical Agriculture, "Farm Crops."
 2. Veterinary Medicine and Surgery.
 3. Civil Government, *or other elective*.
- 3d Term—1. Practical Agriculture, "Farm Animals."
 2. Economics, "Accounts, Markets, etc."
 3. Political Economy, *or other elective*.

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.

The Rhetorical Exercises in the College of Agriculture are the same as in corresponding years and terms of the Scientific Courses. See page 49.

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

OBJECT.

The studies and exercises of this course are designated 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 following is the

I. SCIENTIFIC COURSE. COLLEGIATE DEPARTMENT.

Class	FIRST TERM.	SECOND TERM.	THIRD TERM.
III.	1. Elementary Chemistry. 2. History— <i>Ancient</i> .	1. Drawing (10 hours). 2. Algebra.	1. Elementary Botany. 2. Geometry.
	3. English, or German (<i>begun</i>), or Cicero— <i>Orations</i> .	3. English (<i>continued</i>), or German (<i>continued</i>), or Virgil— <i>Æneid</i> .	3. English (<i>continued</i>), or Virgil— <i>Æneid</i> , or German— <i>Selections</i> .
II.	1. Draughting (10 hours). 2. Higher Algebra.	1. Physics. 2. Trigonometry (3). History— <i>Medicæ</i> (2).	1. General Chemistry. 2. Botany (<i>continued</i>).
	3. English, or German— <i>Lessing</i> , or Latin— <i>Livy</i> .	3. English, or German— <i>Schiller</i> , or Latin— <i>Livy</i> .	3. English, or German— <i>Goethe</i> . 4. Surveying (2 hours).
I.	1. Applied Chemistry. 2. Physics (<i>continued</i>).	1. Descriptive Geometry. 2. Rhetoric.	1. Zoology— <i>Elements</i> . 2. Conic Sections (3). History— <i>Modern</i> (2).
	3. English, French (<i>begun</i>), or Latin— <i>Horace</i> .	3. English. <i>Anglo Saxon</i> or French (<i>continued</i>). 4. Analytical Chemistry (6 hours.)	3. English, <i>Early Eng.</i> or French— <i>Selections</i> , or Latin— <i>Tacitus</i> . 4. Analytical Chemistry (4 hours).

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. Elementary Chemistry. 2. How Crops Grow. 3. English, or German.	1. Mechanical Drawing. 2. Algebra. 3. English, or German.	1. Elementary Botany. 2. How Crops Feed. 3. English, or German.
II.	1. Soils and Manures. 2. Drawing (10 hours). 3. English, or German.	1. Farm Crops. 2. Physics. 3. English, or German.	1. General Chemistry. 2. Botany. 3. English, or German.
I.	1. Applied Chemistry. 2. Horticulture. 3. English, or French.	1. Horticulture. 2. Meteorology, and Climatology. 3. English, or French. 4. Analytical Chemistry.	1. Practical Agriculture <i>Farm Animals.</i> 2. Zoology. 3. English, or French. 4. Analytical Chemistry.

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.

II. 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 1880-81, 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, 1880.

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, 1880.

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, 1881.

1. Farm Drainage and Farm Accounts.	2. Agriculture— <i>Farm Crops.</i>	3. Horticulture— <i>Vegetables.</i>
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IV. THE FARMERS' 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, etc., Grain 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.

The above course of lectures will be given next year, 1880-1, provided that by the first day of November, 1880, thirty persons not members of any class in the University shall have signified to the President of the University their intention to attend this course.

APPENDIX.

Important Act of the Legislature, Proceedings of the High School Board, Entrance Examinations for the Year 1880-81, Almanac for 1880-81, 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 appointed 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 inspection 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, etc.

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 Four (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, physiology, natural philosophy, English composition, general history, Latin grammar and reader, and two books of Caesar'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 classical 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 not be 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:

Anoka, Albert Lea, Austin, Blue Earth City, Caledonia, Cannon Falls, Chatfield, Crookston, Detroit, Duluth, Eyota, Faribault, Garden City, Glencoe, Hastings, Henderson, Howard Lake, Kasson, Lake City, Lanesboro, Le Sueur, Litchfield, Mankato, Mantorville, Monticello, Moorhead, Northfield, Osseo, Owatonna, Plainview, Red Wing, Redwood Falls, Rochester, Rushford, Sauk Center, Spring Valley, St. Cloud, St. Peter, Wabasha, 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, 1880-81.

PROGRAMME:

I. SOUTHEAST DISTRICT—PROF. M. MARSTON, IN CHARGE.

AUSTIN	June 8	LANESBORO	June 18
SPRING VALLEY	" 10	WINONA	" 21
ROCHESTER	" 14	LAKE CITY	" 23
CHATFIELD	" 16	RED WING	" 25

II. SOUTHWEST DISTRICT—PROF. C. W. HALL, IN CHARGE.

FARIBAULT	June 7	WELLS	June 16
OWATONNA	" 9	MANKATO	" 18
WASECA	" 11	ST. PETER	" 21
ALBERT LEA	" 14	LE SUEUR	" 23

III. NORTH DISTRICT—PROF. S. C. HUTCHINSON, IN CHARGE.

ST. CLOUD	June 8	FERGUS FALLS	" 15
SAUK CENTER	" 10	WILLMAR	June 21
ALEXANDRIA	" 12	LITCHFIELD	" 23
GLENCOE	June 25		

IV. IN MINNEAPOLIS, AT THE UNIVERSITY, JUNE 22, AND AT THE BEGINNING OF THE NEW YEAR, SEPT. 8.

Examinations begin at 9 A. M. unless otherwise announced.

These examinations will be open to all persons who desire to enter the University, and all applicants who pass these examinations thereby become entitled to admission, and must avail themselves of that privilege within two years. Applicants so desiring may offer part of the above subjects and postpone the remainder to some later examination; and applicants who have been heretofore partially examined can be further examined at these times.

Paper will be furnished. For Rules see Calendar 1877-8.

ALMANAC, 1880-81.

SEPTEMBER, 1880. [FIRST TERM.]		OCTOBER, 1880. [FIRST TERM.]	
1	Wed.	Executive Committee meet.	1 Fri.
* * *		* * * *	2 Sat.
		(YEAR 1880-81 BEGINS.	3 Sun.
7	Tues.	Gen. Fac. meet 9 a. m.	4 Mon.
		Spec. Fac. meet on call.	5 Tues.
8	Wed.	Entrance exam'tions 8:30 a. m.	6 Wed.
9	Thurs.	Entrance examination contin.	7 Thurs.
10	Fri.	Examination—advanced rank	8 Fri.
11	Sat.	Examinations concluded. 1 w.	9 Sat.
12	Sun.		10 Sun.
13	Mon.		11 Mon.
14	Tues.	Recitations and lectures beg.	12 Tues.
15	Wed.	Library and Museums open.	13 Wed.
16	Thurs.		14 Thurs.
17	Fri.		15 Fri.
18	Sat.	Gen. Fac. meet Saturdays, 4	16 Sat.
19	Sun.	[p. m. . . . 2 w.	17 Sun.
20	Mon.	[m.	18 Mon.
21	Tues.	Literary societies meet 7:30 p.	19 Tues.
22	Wed.	Military instruction begins.	20 Wed.
23	Thurs.		21 Thurs.
24	Fri.		22 Fri.
25	Sat.	..... 3 w.	23 Sat.
26	Sun.		24 Sun.
27	Mon.	Executive Committee meet.	25 Mon.
28	Tues.		26 Tues.
29	Wed.		27 Wed.
30	Thurs.		28 Thurs.
			29 Fri.
			30 Sat.
			31 Sun.
			Fac. Coll. S. L. & A. 5 p. m. 4 w.
			..... 5 w.
			State Constitution adp'td 1857
			..... 6 w.
			..... 7 w.
			Executive Committee meet.
			..... 8 w.
NOVEMBER, 1880. [FIRST TERM.]		DECEMBER, 1880. [FIRST TERM ENDS.]	
			[2D TERM BEGINS.]
1	Mon.	Election Day.	1 Wed.
2	Tues.		2 Thurs.
3	Wed.		3 Fri.
4	Thurs.		4 Sat.
5	Fri.		5 Sun.
6	Sat.	Faculty S. L. & A. 5 p. m. 9 w.	6 Mon.
7	Sun.		7 Tues.
8	Mon.		8 Wed.
9	Tues.		9 Thurs.
10	Wed.		10 Fri.
11	Thurs.		11 Sat.
12	Fri.		12 Sun.
13	Sat.	..... 10 w.	13 Mon.
14	Sun.		14 Tues.
15	Mon.		15 Wed.
16	Tues.		16 Thurs.
17	Wed.		17 Fri.
18	Thurs.		18 Sat.
19	Fri.		19 Sun.
20	Sat.	..... 11 w.	20 Mon.
21	Sun.		21 Tues.
22	Mon.		22 Wed.
23	Tues.		23 Thurs.
24	Wed.		24 Fri.
25	Thurs.	National Thanksgiving Day.	25 Sat.
26	Fri.	Executive Committee meet.	26 Sun.
27	Sat.	..... 12 w.	27 Mon.
28	Sun.		28 Tues.
29	Mon.		29 Wed.
30	Tues.	Term examinations begin.	30 Thurs.
			31 Fri.
			Examinations continued.
			FIRST TERM ENDS.
			Recess.
			SECOND TERM BEGINS.
			Recitations and lectures beg.
			Gen. Fac. meet Saturdays, 4
			[p. m. 1 w.
			[Regents.
			ANNUAL MEETING Board of
			Fac. Coll. Agr. meet 4 p. m.
			Fac. Coll. Mech. Arts. meet 4
			[p. m. 2 w.
			Recess to January 4.
			CHRISTMAS DAY. 3 w.
			Executive Committee meet.

JANUARY, 1881. [SECOND TERM.]		FEBRUARY, 1881. [SECOND TERM.]	
1 Sat.	NEW YEAR'S DAY.	1 Tues.	
2 Sun.		2 Wed.	
3 Mon.		3 Thurs.	
4 Tues.		4 Fri.	
5 Wed.		5 Sat.	Faculty S. L. & A. meet 4 p.m.
6 Thurs.		6 Sun.	8 w.
7 Fri.		7 Mon.	
8 Sat.	Faculty S. L. & A. meet 4 p.m.	8 Tues.	
9 Sun.		9 Wed.	
10 Mon.		10 Thurs.	
11 Tues.		11 Fri.	
12 Wed.		12 Sat.	..... 9 w.
13 Thurs.		13 Sun.	
14 Fri.		14 Mon.	
15 Sat.	..... 5 w.	15 Tues.	
16 Sun.		16 Wed.	
17 Mon.		17 Thurs.	
18 Tues.		18 Fri.	University Charter, 1868.
19 Wed.		19 Sat.	..... 10 w.
20 Thurs.		20 Sun.	
21 Fri.		21 Mon.	
22 Sat.	..... 6 w.	22 Tues.	WASHINGTON'S BIRTHDAY.
23 Sun.		23 Wed.	Executive Committee meet.
24 Mon.		24 Thurs.	
25 Tues.		25 Fri.	
26 Wed.	Executive Committee meet.	26 Sat.	..... 11 w.
27 Thurs.		27 Sun.	
28 Fri.		28 Mon.	
29 Sat.	..... 7 w.		
30 Sun.			
31 Mon.			
MARCH, 1881. [SECOND TERM ENDS. | THIRD TERM BEGINS.]		APRIL, 1881. [THIRD TERM.]	
1 Tues.	Term examinations begin.	1 Fri.	
2 Wed.	Term examinations.	2 Sat.	..... 4 w.
3 Thurs.	SECOND TERM CLOSES.... 12 w.	3 Sun.	
4 Fri.		4 Mon.	
5 Sat.		5 Tues.	Last day for briefs of Com-
6 Sun.		6 Wed.	[mencement parts.]
7 Mon.		7 Thurs.	
8 Tues.	THIRD TERM BEGINS.	8 Fri.	
9 Wed.	Recitations and lectures beg.	9 Sat.	..... 5 w.
10 Thurs.		10 Sun.	
11 Fri.		11 Mon.	
12 Sat.	Gen. Faculty meet Saturdays	12 Tues.	
13 Sun.	[4 p. m. 1 w.]	13 Wed.	
14 Mon.		14 Thurs.	
15 Tues.	Fac. Coll. Agr. meet 4 p. m.	15 Fri.	Good Friday.
16 Wed.		16 Sat.	..... 6 w.
17 Thurs.	Fac. Coll. Mech. Arts meets 4	17 Sun.	EASTER DAY.
18 Fri.	[p. m.]	18 Mon.	
19 Sat.	..... 2 w.	19 Tues.	
20 Sun.		20 Wed.	
21 Mon.		21 Thurs.	
22 Tues.		22 Fri.	
23 Wed.		23 Sat.	..... 7 w.
24 Thurs.		24 Sun.	
25 Fri.		25 Mon.	[mencement parts.]
26 Sat.	..... 3 w.	26 Tues.	Last day for drafts of Com-
27 Sun.		27 Wed.	Executive Committee meet.
28 Mon.	Executive Committee meet.	28 Thurs.	
29 Tues.		29 Fri.	
30 Wed.		30 Sat.	..... 8 w.
31 Thurs.			

MAY, 1881. [THIRD TERM.]		JUNE, 1881. [THIRD TERM.]	
1 Sun.			
2 Mon.			
3 Tues.			
4 Wed.			
5 Thurs.			
6 Fri.			
7 Sat.	..... 9 w.	1 Wed.	ALUMNI DAY. Address 8 p.m.
8 Sun.			
9 Mon.			
10 Tues.	Last day for the final copy of		
11 Wed.	{Commencement parts.		
12 Thurs.			
13 Fri.			
14 Sat.	..... 10 w.	2 Thurs.	THE COMMENCEMENT.
15 Sun.			
16 Mon.			
17 Tues.			
18 Wed.			
19 Thurs.			
20 Fri.			
21 Sat.	..... 11 w.	3 Fri.	THE VACATION BEGINS.
22 Sun.			
23 Mon.	Executive Committee meet.		
24 Tues.			
25 Wed.	Library closes for inventory.		
26 Thurs.			
27 Fri.	Term examinations.		
28 Sat.	Term examinations..... 12 w.		
29 Sun.	[cieties, 8 p. m.]		
30 Mon.	Address before Literary So-		
31 Tues.	SENIOR CLASS DAY.		

The First Term of the University year 1881-82 will begin September 6th, 1881, at 9:00 a. m.

SPECIAL ANNOUNCEMENT.

The vacancies in the corps of instruction occurring at the close of the year 1879-80. will be promptly filled by the Board of Regents, who have the opportunity to select from a large number of candidates of high qualifications. Public notice will be given of the elections. The Board are confident that at the opening of the new year the institution will offer greater advantages than heretofore.

General Correspondence should be addressed,

“ PRESIDENT OF THE UNIVERSITY OF MINNESOTA.

Minneapolis, Minnesota.”

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