Listed in the Wisconsin Administrative Code in A-E 6.03 in paragraph (1) is a list of tasks that an applicant needs to have completed in his or her work experience to qualify for registration as a land surveyor in the State of Wisconsin. The applicant needs to have experience in all of the tasks listed in paragraph (a) 1. and 2. At least two thirds of the applicant’s experience shall be acquired in all of the following areas listed in paragraph (a) 1. and 2. Academic coursework which provides the applicant with knowledge and skill in some areas of practice listed in paragraphs (a) and (b) may be claimed as equivalent to experience. What this means is that an applicant need not experience all of the tasks in a work environment but could experience the task in a surveying class taken in a college setting. The word some is used here, so this means not all of the tasks could be experienced this way, just a few. In reviewing the list, tasks such as subdividing sections, writing legal descriptions, preparing Certified Survey Maps,
Subdivision Plats and Plat of Survey Maps are some of the tasks that could be completed in a college setting in a land surveying class, however the other tasks listed need to be experienced in a working environment under the direction of a registered land surveyor. All tasks including the ones granted in a college setting need to done under the direction of a licensed land surveyor. No more than one-third should be done in a college setting. It is the intent of this position paper to help the applicant understand the tasks listed in the Administrative Code by giving examples of what the tasks mean.

1. Locating land boundaries and land boundary corners including all of the following services:

a. Researching public and private records and interpreting legal descriptions, deeds, and survey maps.

In Wisconsin all boundary surveys must comply with A-E 7.03 of the Wis. Admin. Code which states: “Boundary Location. Every property survey shall be made in accordance with the records of the register of deeds as nearly as is practicable. The surveyor shall acquire data necessary to retrace record title boundaries such as deeds, maps, certificates of title and center line and other boundary line locations. The surveyor shall analyze the data and make a careful determination of the position of the boundaries of the parcel being surveyed.”

The land surveyor should obtain copies of necessary adjoining conveyances (deeds) called for in the legal description of the property surveyed from the register of deeds office. The surveyor should obtain copies of all maps called for in the deeds from the county surveyor’s office, register of deeds, property lister’s office, state and county highway departments or any other source available to the surveyor.
The surveyor must gather all documents necessary to perform the boundary survey and then analyze the information.

This item could be done in a college setting as part of a research project.

b. Locating lost and obliterated corners and United States public land survey system corners and reestablishing or perpetuating monuments of the corners.

In performing a boundary survey a field search should be made to find the monuments called for in the documents or to locate the former position of these monuments. This should be done by the discovery of the monument itself or accessories to the monument. Lost property corners or government corners must be established by proportionate measurement. Obliterated corners may be restored to their former position by competent witness evidence.

c. Establishing, reestablishing and perpetuating survey monuments.

In every boundary survey there may be one or more survey monuments that need to be established or set to mark the boundary corners. This may be done when creating a parcel or parcels of land for a Subdivision Plat, Certified Survey or for a parcel of land that does not have to comply with Chapter 236 of the Wisconsin Statutes. These survey monuments may also be reestablished from a previous survey or replaced with a new monument to perpetuate the location if the monument has been destroyed or disturbed. When performing a boundary survey it may be necessary to replace survey monuments of the Public Land Survey System and/or boundary corners of parcels of land which monuments have been lost or obliterated. This may also lead to the preparation of a Land Record Form according to A-E 7.08 of the Wisconsin Administrative Code for the establishment of corners of the Public Land Survey System. This may also include the
field work of witnessing a government corner or resetting a monument to perpetuate its location after discovering the government monument has been destroyed or disturbed.

d. **Subdividing sections.**

In most boundary surveys in the Public Land System a section of land needs to be divided into smaller or aliquot parts. This may include the setting of a 1/16 corner(s) and/or the setting of the Center ¼ corner on the interior of a section and/or the establishing of a 1/16 or ¼ line of the interior of a section. This type of division is performed by protraction according to the rules of the BLM manual of instructions of 1973 or any other manual or rules that were in place at the time of the original subdivision of the section survey. This work can be a partial subdivision of a section or a complete division of the section into quarter-quarter sections. This task could be done in a college setting as part of a class.

e. **Establishing or retracing property lines to determine length and bearing.**

When performing a boundary survey, and monuments are recovered defining the location of a property line, measurements between these monuments are taken by taping, electronic distance or with Global Positioning Systems to determine their length. Also in performing a boundary survey, angles are measured from other found monuments to determine the direction or bearing of a property line.

f. **Reestablishing obliterated property lines.**

A property line is the division between two parcels of land or between the parcel of land and the street. An obliterated property line or obliterated property corner is one where there are no remaining traces of the monument(s) or its/their accessories which control the line, but whose location(s) has/have been perpetuated or may be recovered beyond
reasonable doubt by the acts and testimony of the interested landowners, competent surveyors, other qualified local authorities, witnesses, or by some acceptable record evidence.

A position that depends on the use of collateral evidence can be accepted only as duly supported, generally through proper relation of known corners, and by agreement with the field notes regarding distances to natural objects, stream crossing, line trees and off-line tree blazes or unquestionable testimony according the BLM Manual of 1973.

g. Preparing descriptions of real property from data acquired by field measurements and other evidence of property location.

Every boundary survey in Wisconsin requires the surveyor to prepare a legal description of the property. The description written is from the information gathered in the field survey. A closed traverse should be performed to analyze the field measurements and to adjust the error to form a geometrically closed figure. Field measurements need to be preformed to meet the minimum standards according to A-E 7.07 of the Wis. Admin. Code and from this information a legal description is written.

This task could be done in a college setting as part of a class.

h. Conducting resurveys.

Performing a resurvey of an existing survey is a type of boundary survey that is retracing the lines of an earlier survey, in which all points of the earlier survey that are recovered are held fixed and used as control. If too few points of the earlier survey are recovered to satisfy the control requirements of the resurvey, a new survey may be made.
2. Preparing maps including all of the following.

a. Maps of sections or portions of sections or townships as established by the original public land survey and subdivisions of those sections in accordance with the statutes of the United States and the rules and regulations made by the secretary of the interior in conformity thereto.

Under this item the code is stating that the surveyor needs to prepare maps of the boundaries of a section(s) and/or portions of sections of land, and/or entire townships showing the measured bearings and distances between government corners from a field survey. This could also include preparing a map showing the protraction of a section of land into aliquot parts from a field survey showing the distances and bearings between government corners and or 1/16 corners. This information could be part of a separate survey of a section or a township or part of any boundary survey.

b. Subdivision plats prepared in accordance with the Wisconsin statutes or local ordinances.

This includes the preparation of subdivision plats, certificates, legal descriptions, and the performing the computations needed to create the layout of streets and the configuration of the lots and blocks all according to Chapter 236 of the Wisconsin Statutes and any local ordinances. Only work done in conformity to the laws of the State of Wisconsin would be accepted here. This task could be completed in a college setting as part of a class.
c. Certified survey maps prepared in accordance with the Wisconsin statutes or local ordinances.

This includes the preparation of Certified Survey Maps, certificates, legal descriptions, and performing the computations needed to create the layout of streets and the configuration of the lots all according to Chapter 236.34 of the Wisconsin Statutes and any local ordinances. Only work done in conformity to the laws of the State of Wisconsin would be accepted here. This task could be completed in a college setting as part of a class.

e. Official plat or maps of land in this state in accordance with Chapter A-E 7 of the Wisconsin Administrative Code.

This includes the drafting, computing, and writing of legal descriptions from field measurements showing the monumentation of the boundary of the survey and the relationship between found and set monuments all according to the requirements in Chapter A-E 7 of the Wisconsin Administrative Code. In Wisconsin these maps are commonly referred to as Plat of Survey Maps. This task could be completed in a college setting as part of a class.

(b) Not more than one-third of an applicant’s experience may be acquired in:

In this area of the code no more than one-third of the total work experience may be in the areas listed below 1 through 7. A candidate may have more hours in these areas listed below, however no more than 16 ½ months or 2,666 hours for the 4 years of experience requirement and 8 1/3 months or 1,333 hours for the 2 years of experience requirement would be credited toward the practice in land surveying work of a satisfactory character.
1. Preparing highway and railroad rights-of-way maps.

This includes the drafting and computing needed for the preparation of highway and railroad right-of-way plats.

2. Construction staking for highways, roads, streets or similar projects within the boundaries of established rights-of-way.

This includes the setting of grade stakes for alignment and grade for the construction of highways, county roads, residential streets and/or utilities in the field using surveying equipment.

3. Performing topographic surveys.

This includes the gathering of data regarding the position of natural and artificial features using surveying equipment for the preparation of site plans, topographic maps with contours and site information for engineering projects.

4. Developing control networks for aerial photography unless property lines are used for control.

This includes the use of surveying equipment for the establishing of vertical and horizontal control for the development of aerial photography.

5. Performing new building layout or construction surveys.

This includes the use of surveying equipment for the establishment of alignment and grade for the construction of buildings, and above and underground utilities.

6. Transportation project plats in accordance with s. 84.095, Stats., and ss Trans 233.03 and 233.04.

This includes the drafting and computing that is necessary for the preparation of a Transportation Plat.
7. Condominium plats prepared in accordance with Chapter 703 of the Wisconsin Statutes.

This includes the drafting and computing that is necessary for the preparation of a Condominium Plat in the State of Wisconsin according to the state statutes.