32 States Require Geologist Licensure
Since 2001, Washington State requires that all practicing geologists have a professional license

18.220 RCW & 308-15 WAC

WAC = Washington Administrative Code (policy interpretations of the law)

RCW = Revised Code of Washington (laws)
Why is licensure necessary in WA?

To ensure the protection of the environment and the public's health, safety, and welfare.
Who needs to be licensed?

Anybody who practices geology or represents that they are able to perform the work of a geologist (e.g., uses verbal claim, sign, advertisement, letterhead, business card)
Licensing Exemptions

- Working under a licensed geologist’s supervision (e.g., your first job)
- US Federal Government (e.g., USGS, Forest Service)
- Energy & minerals exploration
- Research and teaching
Why get a license?

• Because it is the law! 18.220 RCW & 308-15 WAC

• More job opportunities and professional growth potential

• Portable to 32 states + Puerto Rico (it is the law in most western states, e.g., California, Idaho, Oregon).
How do geologists make a living in 2019?

States with the highest geoscientist employment level:

1. Texas
2. California
3. Colorado
4. Washington
How do I get a Geologist License?

Your Name Here
Geologist Licensing is managed by a Board

<table>
<thead>
<tr>
<th>Member</th>
<th>Role</th>
<th>Term expires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Tebb</td>
<td>Geologist/Engineering Geologist/Hydrogeologist - Chair</td>
<td>May 1, 2024</td>
</tr>
<tr>
<td>Eileen Webb</td>
<td>Geologist - Vice Chair</td>
<td>May 1, 2024</td>
</tr>
<tr>
<td>James Struthers</td>
<td>Geologist/Engineering Geologist - Secretary</td>
<td>May 1, 2023</td>
</tr>
<tr>
<td>Carla Brock</td>
<td>Geologist and Hydrogeologist</td>
<td>May 1, 2021</td>
</tr>
<tr>
<td>Kathy Troost</td>
<td>Geologist</td>
<td>May 1, 2022</td>
</tr>
<tr>
<td>Casey Hanell</td>
<td>State Geologist/Engineering Geologist</td>
<td>Ex-officio</td>
</tr>
<tr>
<td>Vacant</td>
<td>Public Member</td>
<td></td>
</tr>
</tbody>
</table>
Steps to Licensure

Meet the educational requirements and pass ASBOG’s Fundamentals of Geology Exam

Geologist in Training (GIT)

Have a geology degree and acquire 5 years of working experience and pass ASBOG’s Practice of Geology Exam

Pass the Practice Exam and document 5 years of working experience in a specialty and pass the Specialty Exam
How do I get a Geologist License?

1. Meet the educational requirements
Educational Requirements

(2) Education. You have graduated from an accredited college or university with:

(a) A degree in the geological sciences, or a related degree approved by the board, and have either:

(i) Twenty-four semester or thirty-six quarter hours of upper division geology courses that includes 14 semester or 21 quarter credits (nonrepeatable) from the following list:

- Earth Materials (combination of mineralogy and petrology)
- Economic Geology
- Engineering Geology
- Field Camp
- Geochemistry
- Geomorphology
- Geophysics
- Hydrogeology
- Mineralogy
- Petrology
- Sedimentology
- Stratigraphy
- Structural Geology
Or

(ii) Successfully completed coursework that is determined by the board to be educationally equivalent in content and rigor to the classes listed above. You must submit documentation that demonstrates your coursework is equivalent to the requirements in (a)(i) of this subsection acceptable to the board. Examples of documentation include course syllabi, copies of study materials, and the tables of contents of books used in the course.
How do I get a Geologist License?

1. Meet the educational requirements

You meet the education requirements if you receive a B.S. Degree in Geology WWU.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
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<tbody>
<tr>
<td>306</td>
<td>Mineralogy</td>
<td>4</td>
</tr>
<tr>
<td>310</td>
<td>Geomorphology</td>
<td>5</td>
</tr>
<tr>
<td>318</td>
<td>Structural Geology</td>
<td>4</td>
</tr>
<tr>
<td>352</td>
<td>Geophysics</td>
<td>4</td>
</tr>
<tr>
<td>406</td>
<td>Petrology</td>
<td>4</td>
</tr>
<tr>
<td>409</td>
<td>Field Methods and Theory</td>
<td>6</td>
</tr>
<tr>
<td>410</td>
<td>Field Mapping</td>
<td>6</td>
</tr>
<tr>
<td>415</td>
<td>Stratigraphy and Sedimentation</td>
<td>4</td>
</tr>
</tbody>
</table>

WWU’s B.S. Upper Division Core: 21 credits

Total: 37 credits
If you choose the B.S. in Geophysics degree plan, make sure you take enough upper division geology courses (300 and above) to accumulate 36 credits and 21 of the credits must be from the requirement list.

21 quarter credits (nonrepeatable) from the following list:

- Earth Materials (combination of mineralogy and petrology)
- Economic Geology
- Engineering Geology
- Field Camp
- Geochemistry
- Geomorphology
- Geophysics
- Hydrogeology
- Mineralogy
- Petrology
- Sedimentology
- Stratigraphy
- Structural Geology
If you choose the B.A. in Geology degree plan, make sure you take enough upper division geology courses (300 and above) to accumulate 36 credits and 21 of the credits must be from the list.

21 quarter credits (nonrepeatable) from the following list:

- Earth Materials (combination of mineralogy and petrology)
- Economic Geology
- Engineering Geology
- Field Camp
- Geochemistry
- Geomorphology
- Geophysics
- Hydrogeology
- Mineralogy
- Petrology
- Sedimentology
- Stratigraphy
- Structural Geology
2. Apply to take the ASBOG Fundamentals Exam

The State has adopted the national Association of State Boards of Geology (ASBOG) standardized exam as the Fundamentals Exam (140 multiple choice questions)
Education Requirements

You can take the ASBOG Fundamentals Exam without a degree if you have accumulated 36 quarter credits of upper division courses (300 or above) and 21 of those credits are from this list.

- Earth Materials (combination of mineralogy and petrology)
- Economic Geology
- Engineering Geology
- Field Camp
- Geochemistry
- Geomorphology
- Geophysics
- Hydrogeology
- Mineralogy
- Petrology
- Sedimentology
- Stratigraphy
- Structural Geology
Fundamentals Exam application procedures

http://kula.geol.wwu.edu/rjmitch/geolicense.html
If you want to take the ASBOG Fundamentals Exam before graduating, you must meet the educational requirements about three months in advance, because there is a 90-day processing period.

For example, the spring ASBOG Fundamentals Exam is **March 19, 2021**, but the application deadline is December 31, 2022.

Make sure your fall-quarter grades are recorded on your transcript before you have WWU send it the DOL.
The Fundamentals Exam has 140 multiple choice questions in the categories below.
GEOLOGY STUDY MANUAL

Review for
the National (ASBOG) Geology Licensing Exam

Published by

REG REVIEW, Inc.
37 Rosewell Road
Bedford, NH 03110

http://regreveiw.com

We have two hard copies of this in the Geology office.
Examination Candidates... here are some useful resources for examination preparation

(use Ctrl+f to search)

I. ASBOG\textsuperscript{®} Candidate Handbook \(\ldots\text{click}\)

II. Physical Geology (Open Textbook Library) \(\ldots\text{click}\)

III. MIT Open Courseware (Geology Topics) \(\ldots\text{click}\)

IV. Basic Groundwater Hydrology- USGS WRI 2220 \(\ldots\text{click}\)

V. Engineering Geology Field Manual (Bureau of Reclamation) - Volume I & II \(\ldots\text{click}\)

VI. Rock Mechanics (Rocscience (Evert Hoek, Ph.D.)) \(\ldots\text{click}\)

VII. Visible Geology Web Site \(\ldots\text{click}\)

VIII. Rock and Mineral Jeopardy \(\ldots\text{click}\)

IX. AGI Data Sheets 5th Edition ($for purchase) \(\ldots\text{click}\)

X. AGI GOLI Webinar's \(\ldots\text{click}\)

Last Updated: September 12, 2020

https://www.asbog.org/candidates/candidates.html
How do I get a Geologist License?

3. Pass the Fundamentals of Geology Exam
Number of people that have taken the ASBOG between 1992 and 2017. Note Washington started administering the exam in 2002.
How do I get a Geologist License?

4. Gain five years of work experience as a geologist
Experience Requirements

You must accumulate 5 years of professional geological practice after receipt of a geoscience degree and meet the educational requirements.

• experience earned prior to receiving a degree will not be considered (e.g., summer internships)

• at least 3 years of the 5 must be under the supervision of licensed geologist or others who, in the opinion of the board, are qualified to be in responsible charge

• part-time experience will be prorated
Experience Requirements

Alternative experience credit

• A graduate degree can be counted as a maximum of two years of practicing experience.

• Geological research or teaching at the university or college level is credited year for year if, in the judgment of the board, it is comparable to experience obtained in the practice of geology.
How do I get a Geologist License?

5. Pass the ASBOG Professional Geology Exam
Specialty Professional License Options

Hydrogeologist

Engineering Geologist

Your Name Here

Your Name Here
Specialty Education Requirements

WAC 308-15-055

Completed advanced study in the specialty

- 18 semester/27 quarter hours of specialty course work, OR
- 270 hours of seminars or workshops, OR
- 540 hours of on-the-job training under the supervision of a licensed specialist or others who in the opinion of the board, are qualified to be in responsible charge of specialty work, OR
- or a combination of the above
Specialty Experience Requirements

**WAC 308-15-055**

Complete 5 years of professional specialty practice after completing the advanced education requirements

- 3 years under the supervision of licensed specialist or others who in the opinion of the board are qualified to be in responsible charge
- Part-time experience will be prorated
Specialty Experience Requirements

WAC 308-15-055

Alternative experience credit

- Each year of graduate study counts as one year of training up to a maximum of **two** years
- Geological research or teaching at the university or college level is credited year for year if, in the judgment of the board, it is comparable to experience obtained in the practice of a specialty
Geologists - Licensee Demographics and Trends

<table>
<thead>
<tr>
<th>Active Licensee Counts</th>
<th>Undeclared</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geologist</td>
<td>6</td>
<td>856</td>
<td>281</td>
<td>1143</td>
</tr>
<tr>
<td>HG Only</td>
<td>2</td>
<td>516</td>
<td>118</td>
<td>636</td>
</tr>
<tr>
<td>EG Only</td>
<td>5</td>
<td>278</td>
<td>37</td>
<td>320</td>
</tr>
<tr>
<td>EG &amp; HG</td>
<td>0</td>
<td>160</td>
<td>10</td>
<td>170</td>
</tr>
<tr>
<td>Pending</td>
<td>12</td>
<td>359</td>
<td>216</td>
<td>587</td>
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<tr>
<td>Pending in WA</td>
<td>12</td>
<td>316</td>
<td>196</td>
<td>524</td>
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<tr>
<td>GEO Population</td>
<td>25</td>
<td>2169</td>
<td>662</td>
<td>2856</td>
</tr>
</tbody>
</table>

*Pending counts are for pending initial and reciprocity licenses, not pending endorsements.

<table>
<thead>
<tr>
<th>Geologist In Training (passed FG)</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 28 - 32.4</td>
<td>0</td>
<td>258</td>
<td>413</td>
</tr>
</tbody>
</table>

**most frequent value vs average value

License Count by Status

<table>
<thead>
<tr>
<th>Date</th>
<th>Geologist</th>
<th>HG</th>
<th>EG</th>
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</thead>
<tbody>
<tr>
<td>2016-05-01</td>
<td>3468</td>
<td>551</td>
<td>2259</td>
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<tr>
<td>2017-05-01</td>
<td>3601</td>
<td>618</td>
<td>2246</td>
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<td>2018-05-01</td>
<td>3741</td>
<td>695</td>
<td>2257</td>
</tr>
<tr>
<td>2019-05-01</td>
<td>3791</td>
<td>791</td>
<td>2237</td>
</tr>
</tbody>
</table>

License Count by Endorsement

Run Date: 5/9/2019
For future reference see my web site

http://kula.geol.wwu.edu/rjmitch/index.html
How we can help!
Join the WWU AEG Student Chapter

Established November 2011
What is AEG?

Association of Environmental & Engineering Geologists

Professional organization of geology practitioners, academic geologists, geology teachers, and students.

Membership is FREE to students!
Why Join the WWU AEG Student Chapter?

Professional Development

• Geologist Licensing Resources
• Scholarship Applications
• Resumes
• AEG Meetings in Seattle
• Internships
• Field Trips
• Guest Speakers