Objectives:
My objective in teaching this course is to introduce you to the geology of northern Vermont and its surrounding areas. I hope that this exposure to the state’s geology will better prepare you for tackling your own field problems encountered as part of your thesis, class work, or independent work you may do in the future. I also hope to give you the background necessary to effectively teach your introductory and upper level labs while you’re in graduate school. An additional objective is to give you experience “reading” the Vermont landscape and translating what you see into words and figures that clearly convey the three-dimensional geometry of rocks and surficial materials at a particular site, the geological processes that are operating or have operated in the past, and your interpretation of an area’s history.

Background:
This course has been modeled after the “Fall Field Practicum” (Bot 311) that is taught to incoming Field Naturalist graduate students. While our approach will be less broad-based than the Field Naturalists’ (i.e. focused on geology), I will incorporate other aspects of the landscape’s natural history that have been markedly affected by the geologic history, particularly the human history. A key approach that Field Naturalists use to look at a landscape is to think of “pieces, patterns, and processes.” The “pieces” are the individual physical or biotic components of a landscape. “Patterns” result from the way in which those individual pieces are arranged or distributed in a landscape. “Processes” of course are the forces operating both in the present and in the past that are responsible for the patterns. As geologists, we tend to spend most of our energy focused on the past, but it is helpful to think of the present landscape as being dynamic and not static, and to project a landscape into the future as well.

Preparation:
Be ready to go in the field by 9 AM each Tuesday. Bring a lunch and expect to be out all day in most weather (unless it pours rain!). We’ll try to make at least one bakery/coffee stop for additional food. In most cases we’ll be back by or before 5 PM, but some of our longer trips may keep us away from Burlington longer and we’ll try to make special arrangements for those of you with evening commitments.

“Texts”
The written resources for this course are two different field trip guidebooks published by the New England Intercollegiate Geological Field Conference (NEIGC), an annual fall field conference traditionally hosted by one or more of the colleges in different parts of New England and Atlantic Canada. Field trip guidebook articles are not sent out for review, like most scientific journal articles, and are therefore less “authoritative.” However, most of the information included in the guidebook articles we will read is not published elsewhere. Furthermore, the guidebooks give descriptions of specific field stops as well as instructions on how to get there.
For many of our field trips there will be a guidebook article we can use as a resource. Please take the time to preview (skim) these readings prior to the field trip. They will lend added depth to the learning we do outside and provide resources you can use as you prepare your written site descriptions (see below).

**Written Reports:**

One week after our field trip you should turn in a short (2–3 pages of text is usually more than enough) review of our observations and interpretations, i.e. what did you see and what did you learn? Sketches, photos, maps, and cross-sections should be an important part of these reports as well as references to the guidebook article or other pertinent literature. It is appropriate to reference the background readings or other relevant literature.

Twice during the semester you may choose to not do a write-up. These “outs” may be for field trips you miss because of outside commitments or for field trips you attend, but choose not to write up.

I will give you a copy of an old write-up to give you an example of one student’s approach.