

Two Year Followup: Course material costs for four-year degrees at Oregon's universities

Executive Summary

When we talk about the cost of course materials at Oregon's universities, how much money are we really talking about? In 2019 and 2021, Open Oregon Educational Resources used a standard methodology to gather locally relevant cost data that could be compared across institutions.

Key takeaways:

- Oregon's statewide investment in textbook affordability has resulted in lower costs for students in general education pathways.
- The no-cost/low-cost schedule designation represents an extraordinary potential savings on general education course materials costs.
- Oregon's universities can develop strategies to specifically address course materials costs in upper-division courses.

Key findings:

- The statewide average cost of course materials for the top three four-year degrees at each university is effectively unchanged from 2019 at \$3,592, or \$19.50 per credit.
- The statewide average cost of course materials for general education requirements at each university is 18% lower than in 2019 at \$990.76, or \$15.45 per credit.
- The average lowest-cost general education pathway identified with the no-cost/low-cost schedule designation is 82% lower than in 2019 at \$92.93, or \$1.49 per credit.

The findings of this study show that statewide, average materials costs at Oregon's universities are below the national benchmark published by the College Board. Redesigning general education courses around widely available open educational resources and other low-cost options can offer students significant savings. Lowering costs for upper-division courses is more challenging and relies on using library resources as course materials; institutional grant support; and complex projects to author new OER.

Prominently designating no-cost and low-cost courses in the schedule enables students to make informed choices as they plan their term. If every student who graduated with a bachelor's degree in 2021 were able to pursue the lowest-cost general education pathway when meeting their degree requirements, the estimated savings would be over \$16M. This result demonstrates that the no-cost/low-cost schedule designation is high-impact and worth prioritizing.



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Two Year Followup: Course material costs for four-year degrees at Oregon's universities

This project would not have been possible without the assistance of Oregon's university bookstore managers. Each verified the data presented below to ensure the accuracy of the information collected for their institution. Store managers are essential campus community members who bring expertise in negotiating with publishers, on-demand printing, and compliance with federal reporting requirements in order to support students. Thank you!

Background

In 2015, Open Oregon Educational Resources used a research method conceived by Quill West, Pierce College's Open Education Project Manager, and refined by Nicole Allen, Director of Open Education at SPARC, to gather baseline data on the cost of textbooks for transfer degrees at Oregon's community colleges.

The 2015 blog post from the beginning of this project, titled [Why do we need this research?](#), proposed that Oregon needs local data in order to understand the scope of the problem that our textbook affordability program has set out to solve. In particular, it would be useful to know whether the [College Board's](#) national average recommendation for what students should budget for course materials was applicable in Oregon. The study has now been conducted four times in Oregon's community colleges. Repeating the same research method over time, it is possible not only to make a consistent cost comparison, but also to show that during the six years that Oregon has invested statewide funding in textbook affordability, our community colleges have significantly reduced the cost of course materials for two-year transfer degrees. The most recent community college report is available via [Six Years of Community College Cost Savings: Impact of statewide funding for textbook affordability](#).

The same reasoning applies to Oregon's seven universities. The 2019 report, [What is the cost of course materials for a four-year degree at each university in Oregon?](#), established a baseline for comparison. The present study investigates the difference between the cost data collected in 2019 and 2021.

Research method

This research estimates course materials costs for the three highest-enrolled undergraduate degrees at each university. The course requirements for each of the degree programs are specified in the universities' course catalogs. Because the top degrees vary widely across the state - Oregon Tech, in particular, offers specialized programs - course materials costs are also estimated for the general education requirements at each university. General education



requirements also vary across the state, but it is possible to establish a cost per general education credit that can be compared.

While there are some specific courses required for each degree, there are many possible ways to meet the total degree and graduation requirements. Therefore, where there were multiple options to meet a requirement, the course with the highest enrollment at that university was selected to fulfill that requirement. Data on course enrollments and degree disciplines for each university was provided by the Office of Research and Data of the Oregon Higher Education Coordinating Commission from the most recent year available (2019 for the present study). This research does not suggest a pathway that any individual student would take, but rather looks at the courses that students collectively take most often at each university. This is where cost reductions can have the greatest impact.

The next step was to visit each university bookstore's website and look up the required course materials for each of the courses for the current term. If multiple sections of the course were being taught, the first one on the list was selected. This arbitrary choice accounts for the fact that students often are not able to choose their courses based on course materials cost because of competing priorities such as work schedules or childcare.

For each course, the most and least expensive options for the total cost of materials was recorded. If one book could be used for more than one course in a series, its cost was only counted once. If the course was not offered that term, or no adoption was reported to the bookstore, the store manager looked up prices for the most recent term that an adoption was reported for.

In 2015 Oregon passed [HB 2871](#), which requires all public colleges and universities to designate no-cost and low-cost courses in the schedule. This policy assumes that students may make course selections based on the cost of materials. 6 out of the 7 universities had implemented the schedule designation by Fall 2021. This makes it possible to use the schedule to find the general education degree pathway with the lowest possible materials cost. Again, this is not a program that any individual student would pursue, but demonstrates the significant cost savings that are possible when students have the information and flexibility to choose the lowest-cost option.

Results

Less data was available in 2021 than in 2019. Two universities provided course materials cost information for two rather than three of their top four-year degrees, and two more universities provided no information about four-year degrees (see [Appendix](#)). For the four-year degree information available, average course materials costs were effectively unchanged from 2019. The overall statewide average cost of course materials for the top three four-year degrees at



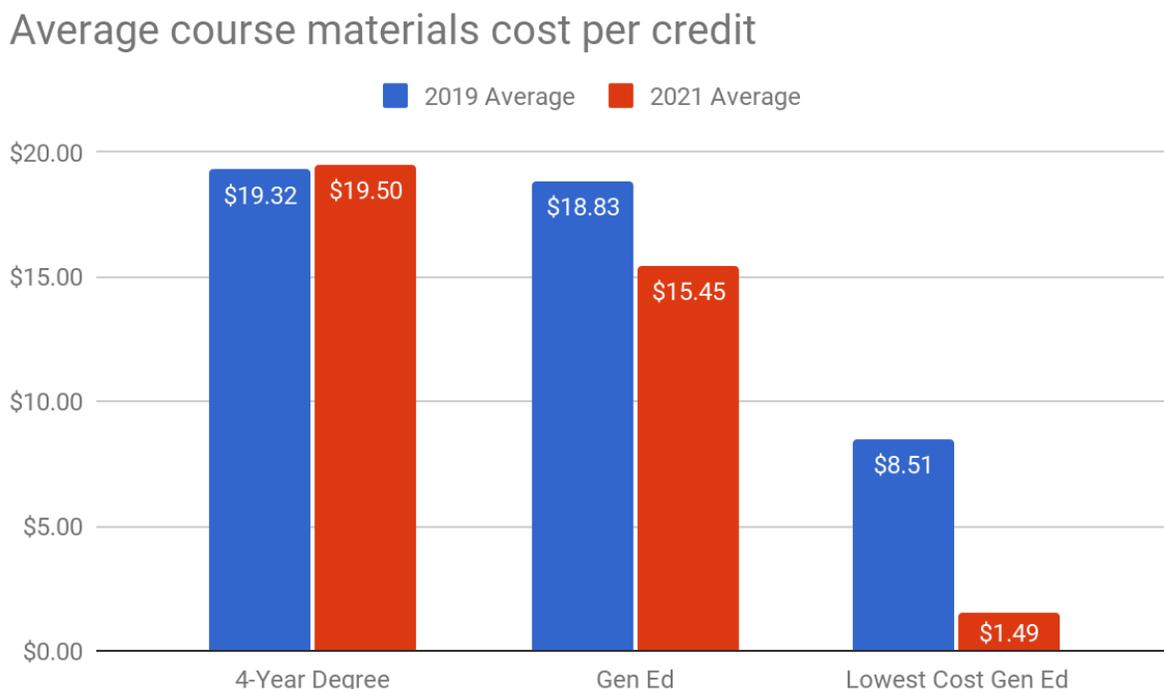
each university where data was available in 2021 is \$3,592, or \$19.50 per credit, compared with the 2019 statewide average of \$3,551, or \$19.32 per credit.

Every university provided course materials cost information for general education requirements, and at 5 of the 7 universities, costs are down. When always choosing the first section of the highest-enrolled courses to meet general education requirements, the overall statewide average is \$990.76 for 64 credits, or \$15.45 per credit. Compared to 2019, the statewide average cost of course materials for general education requirements has fallen by \$3.38 per credit, or 18%.

Assuming maximum flexibility to select courses based on materials cost, the average lowest-cost general education pathway is \$92.93, or \$1.49 per credit. This extraordinarily low number represents a 90% savings compared to the average cost when always choosing section 1. Compared to 2019, the lowest-cost general education pathway has fallen by \$7.02 per credit, or 82%. Two of the six universities with a no-cost/low-cost schedule designation offered zero textbook cost courses that meet *all* general education requirements (again, not necessarily a pathway that any individual student would take).

Figure 1, below, shows the statewide average cost of materials per credit for 4-year degrees and general education requirements (averaging the high and low materials costs for the degree).

Figure 1: Average course materials cost per credit



According to Oregon's [Higher Education Coordinating Commission](#), 18,197 students completed bachelor's degrees in 2019-20 (the most recent year available). If all of those graduates were able to pursue the lowest-cost general education pathway when meeting their degree requirements, the estimated savings would be \$16,257,928.40. This figure demonstrates the significant savings that are possible when students have the information and flexibility to choose the lowest-cost option.

In 2021, average costs at every university in Oregon remain under the [College Board](#) estimate of \$1,240 per year for books and supplies. This national estimate suggests that for a four-year degree, students would budget \$4,960, or \$27.56 per credit (for a 180-credit degree). Making a comparison between the results of the present study and College Board data is not apples-to-apples because the two figures are derived from different methods, but the national data provides a useful point of reference. Both the College Board estimate and Oregon's statewide average for four-year degrees are effectively unchanged between 2019 and 2021.

Comparison with Community College Costs

These findings can be directly compared to the results of the studies using the same research method to estimate the cost of course materials for transfer degrees in Oregon's community colleges (most recent report: [Six Years of Community College Cost Savings: Impact of statewide funding for textbook affordability](#)).

- When always choosing the first section of the highest-enrolled courses to meet degree requirements, the statewide average cost per credit for Associate of Arts Oregon Transfer (AAOT) degree in Oregon's community colleges in 2021 was \$12.69, 18% lower than the statewide average cost per credit for general education requirements in Oregon's universities.
- The statewide average cost per credit for the lowest-cost pathway through the AAOT degree requirements in Oregon's community colleges in 2021 was \$2.26. This is a very low cost per credit, but it is still 34% higher than the lowest-cost statewide average for general education requirements in Oregon's universities.

At both the colleges and the universities, without department- and institution-wide commitments to low-cost and no-cost materials, students will have unpredictable experiences with the same curriculum. Those with the most flexibility in their schedules will be able to select the sections designated as no-cost or low-cost, while those with the least flexibility may have to pay more for the same course. The zero textbook cost pathways that were identified cannot be guaranteed to be available to all students. At the moment, the lowest-cost pathway is a reminder of the impact of faculty choices and the importance of prominently designating courses in the class schedule to make savings information readily available to students. It has the potential to become a curriculum that can be marketed widely to students.



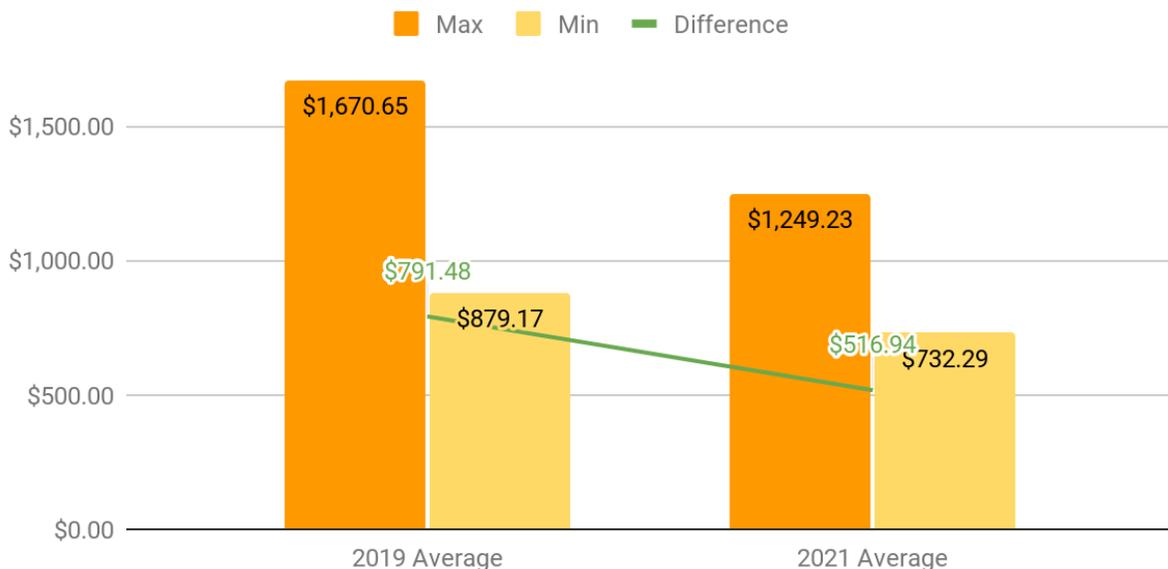
Maximum and Minimum Cost Comparisons

Figure 2 considers in more detail the difference between the maximum and minimum materials costs for general education requirements. The orange bars are the maximum (retail) cost of materials, and the yellow bars are the minimum that a student might pay for materials at the bookstore through rentals, used materials, required only, etc. The green line shows the difference between the maximum and minimum costs. This data shows the effort that bookstore managers are making to keep textbook prices down. Through negotiations with publishers as well as used book, digital, and rental options, they offer an average savings of over \$500 on general education materials, representing 40% off retail prices.

In 2019, on average, the difference between the maximum and minimum price at the bookstore was nearly \$800 – a significant savings for the savvy shopper. In 2021, on average, the difference narrowed by \$274.54, or 35%. With maximum prices lower to begin with, the savings to be found have shrunk. For Oregon students every dollar counts, yet these figures demonstrate that as overall prices come down, traditional savings tactics may become less relevant.

Figure 2: Difference between max and min prices for Gen Ed materials

Difference between Max/Min materials costs for Gen Ed requirements



Hours at Minimum Wage Comparisons



It is illustrative to calculate the number of hours it would take at minimum wage to pay for average materials costs at each university. In fact, some states peg their low-cost designation threshold to the minimum wage (example from [Louisiana](#): “Affordable Educational Resource (AER): A single or collection of required educational resources that may be offered at no or low cost to a student through a post-secondary education institution or an affiliated college bookstore at a pre-sales tax cost to a student that does not exceed an amount equal to four times the federal minimum wage.”) Note that Oregon has different minimum wage rates for the Portland Metro area and nonurban counties (more information on this at [Oregon Minimum Wage Rate Summary](#)).

Figure 3, below, shows the number of hours it would take at the respective minimum wage to earn the average cost of materials for general education requirements (averaging the high and low materials costs). Statewide, the average number of hours that a student would have to work at minimum wage to cover the costs of materials is down, as a result of both lower average textbook prices and increased wages. The figure shows that the average lowest-cost general education pathway represents not just financial savings, but tremendous time savings as well.

Figure 3: How many hours at minimum wage to buy course materials for general education requirements?

Hours at minimum wage to purchase course materials



Course Materials to Tuition Cost Comparisons

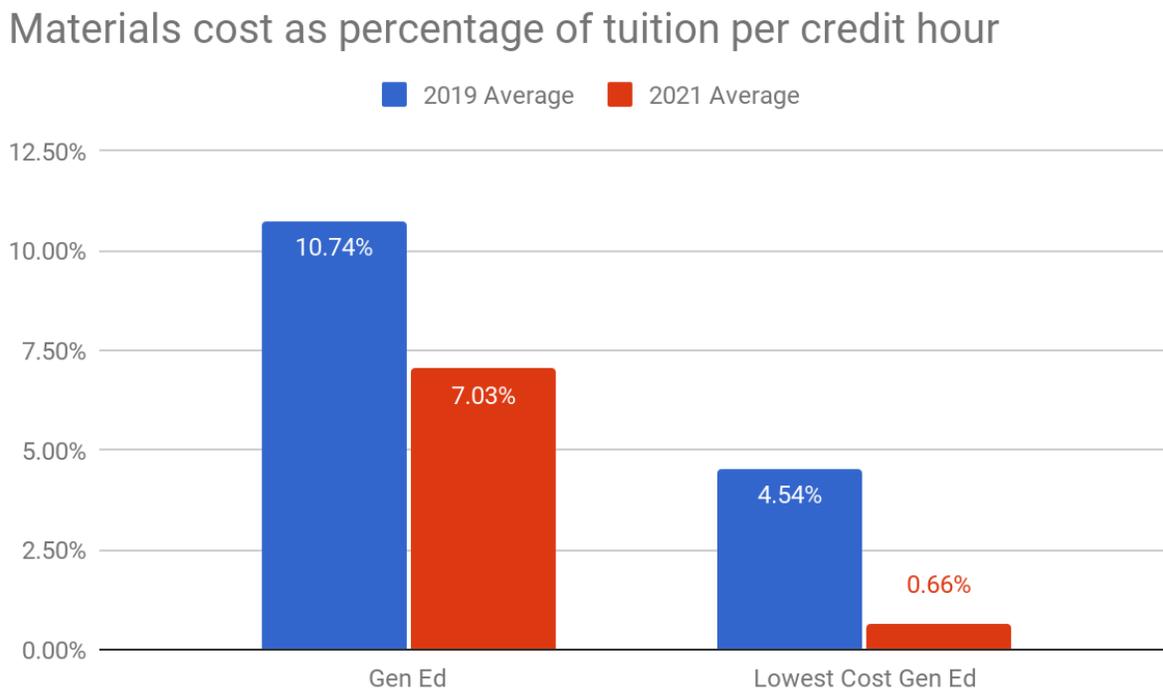


Last, it is possible to compare the cost of course materials with the cost of tuition. Because university tuition is high compared to cost per credit in Oregon’s community colleges, course materials costs represent a smaller proportion of the total cost of a degree at a university. This effect continues in 2021 as tuition at every university in Oregon has increased since 2019, with an average statewide tuition increase of 28% over that time period.

The data shows, nonetheless, that rising tuition costs can be offset by course materials savings. This finding suggests that tuition increases may be more palatable for students if administrators put real support behind textbook affordability initiatives to find the savings elsewhere.

Figure 4, below, shows average materials cost for general education requirements as a percentage of average in-state tuition per credit hour.

Figure 4: Materials cost as percentage of tuition per credit hour



Conclusions

The 2019 benchmark study established that the cost of course materials at Oregon universities is lower than the College Board’s national figure. It estimated that course materials costs at Oregon’s universities are higher than at Oregon’s community colleges, but represent a lower percentage of the cost of attendance because of higher tuition rates.



The present study demonstrates that statewide, compared with the 2019 benchmark, average materials costs for four-year degrees have stayed about the same. Course material costs for general education requirements, however, have fallen by 18%. Where no-cost and low-cost course materials information is available in the course schedule, the lowest-cost general education pathway offers an extraordinary potential savings of 90% over the average materials cost.

These results suggest two conclusions. First, open educational resource development usually prioritizes lower-division, high-enrollment courses (as evidenced in the [OpenStax](#) catalog and the statewide [OER grant requirements](#) in Oregon). Instructors who teach lower-division courses therefore have more options and support available for low-cost or no-cost materials. Progress on lowering costs in these courses in Oregon's universities reflects this. Lowering costs for upper-division or more specialized courses is more challenging and relies on using library resources as course materials; institutional grant support; and complex projects to author new OER.

Second, the results demonstrate that the no-cost/low-cost schedule designation is high-impact and worth prioritizing. Yet without department- and institution-wide commitments to low-cost and no-cost materials, students will have unpredictable experiences with the same curriculum. Oregon's universities can consolidate the gains made in their general education courses by extending the benefit of the lowest-cost pathway to all students. These pathways have the potential to become a curriculum that can be marketed widely to students.

More and more faculty at Oregon's universities are taking the time to thoughtfully redesign their courses around lower-cost materials, with and without the help of grant funding and other incentives. The emerging cost trends show that universities are making use of widely available open general education course materials and can develop strategies to specifically address costs in upper-division courses. These findings help to quantify just how much students stand to benefit from these efforts.



Appendix: Top 3 four-year degrees at each university (2019-20)

University	Degree 1	Degree 2	Degree 3
Eastern Oregon University	Business Administration	Health and Human Performance	Multidisciplinary Studies/Elementary Education (cost data not available)
Oregon Institute of Technology	Mechanical Engineering	Dental Hygiene	Radiologic Science (cost data not available)
Oregon State University	Computer Science, Applied Computer Science Option	Business Administration, Management	Mechanical Engineering
Portland State University	Psychology (cost data not available)	Social Science (cost data not available)	Business Administration (cost data not available)
Southern Oregon University	Business	Psychology	Education Studies
University of Oregon	Social Science: Applied Economics, Business, and Society	Business	Journalism: Public Relations
Western Oregon University	Education Studies (Non-Licensure) (cost data not available)	Psychology (cost data not available)	Business (cost data not available)

