

Student-Instructor Ratio Guidelines for Distance Courses

Consistent with Higher Learning Commission and U.S. Department of Education definitions, Saint Louis University requires distance education courses to "support regular and substantive interaction between the students and the instructor, synchronously or asynchronously" (University Policy for Distance Education). Additionally, SLU's Distance Education Standards (codified in the University policy) require the University to establish and enforce a policy on student-instructor ratios to support effective student learning and to ensure student-student and faculty-student interaction.

Given the importance of context when determining appropriate student-instructor ratios, the Distance Education Office offers the following guidelines on student-instructor ratios, rather than a one-size-fits-all policy. The information provided below is, to the extent possible, grounded in the research literature. It is important to note that these Guidelines are about the ratio of students to instructors (or those playing instructional roles in a course); they are not "enrollment caps" for courses, since not all courses have the same number of instructors.

What do we mean by "Instructor"?

For the purposes of this guidance, "instructor" means a person playing a co-equal instructional role as the instructor(s) of record. This means each instructor actively and fully participates in instruction, engages with students in ways that contribute to the course's evidence of RSI (regular and substantive interaction between students and instructor, initiated by the instructor), assessment of student learning, etc. In cases where a TA or co-instructor is more limited in their course role (e.g., they provide grading assistance or other support for the instructor but are not substantially engaged in the full instructional work of the course), the addition of a TA/co-instructor may not support a significant increase in class size. Additionally, in cases where one or more instructors are new to distance teaching, the addition of a TA/co-instructor may not support a significant increase in class size.

Asynchronous Online Delivery

The appropriate class size for asynchronous online courses has been debated since the inception of online education (Ko and Rossen, 2010). Some researchers argue smaller class sizes result in better student achievement (McCarthy & Samors, 2009; Rovai, 2002a), while others suggest teaching strategies are more important than class size in determining student achievement, with the caveat that class size for online courses should generally be smaller than for the same course in a face-to-face setting (Ko & Rossen, 2010; Swan, 2002). In general, the literature suggests that online class sizes of between 15-30 students allow for the development of community among the learners and are manageable for instructors who employ an average to above-average level of interactivity (Grandzol & Grandzol, 2010; Orellana, 2006; Palloff & Pratt, 2007; Rovai 2002b). The type of course and the design of the course are the primary factors in determining class size for a specific course, and decisions about optimal online class size cannot be made without consideration of these factors.

An online course typically includes the following characteristics:

- Assigned readings usually weekly
- Instructor-provided notes and/or mini lectures
- Requirements for students to complete multiple discussion postings/virtual interactions per week which are graded (e.g., a substantial initial discussion posting synthesizing or critically reflecting on assigned readings, followed by postings in which students respond to discussion postings from other students)
- Students are working on papers or projects throughout the course; the instructor is actively involved in guiding the students' paper/project development and may periodically review drafts.

While there is not a clear consensus on an optimal number of students in an online asynchronous class (Taft et al., 2011), the literature provides guidance about appropriate student-instructor ratios for online courses. Online courses that include the typical characteristics noted above and are taught by an *experienced* online instructor, offered in a semester-long term, offered at the undergraduate or master's level, and designed with average level of writing intensity* should have a student-instructor ratio ranging from 20:1 to 25:1.

Factors that may affect the student-instructor ratio, and which may warrant a lower ratio, typically between 15:1 to 20:1, or a slightly higher ratio up to 30:1 include:

- Experience of the instructor teaching in the online environment
 - Instructors new to teaching online may warrant a lower student-instructor ratio.
 - Experienced online instructors may be able to effectively manage courses with a higher student-instructor ratio.
- Pedagogical approaches used in the online course
 - Courses with a significant amount of instructor-student interaction, studentstudent interaction, instructor feedback to individual students, and/or applicationbased instruction may warrant a lower student-instructor ratio.
 - Courses with smaller amounts of instructor-student interaction, student-student interaction, instructor feedback to individual students, and/or recall-based instruction may warrant a higher student-instructor ratio.
- Length of the course
 - Courses offered during a significantly compressed term may warrant a lower student-instructor ratio.
 - Courses offered during a traditional term may warrant a higher student-instructor ratio.
- Level of the course
 - Introductory-level courses may warrant a higher student-instructor ratio, while more advanced courses may warrant a lower student-instructor ratio.
 - Graduate courses beyond the master's level or courses that are part of a professional degree program may warrant a different student-instructor ratio.
- Writing intensity* of the course
 - Courses designed with high writing intensity may warrant a lower student-instructor ratio.
 - o Courses designed with low writing intensity may warrant a slightly higher student-

instructor ratio.

* Factors that affect a course's level of writing intensity include: number, type, length, and frequency of writing assignments; amount and frequency of written feedback expected from the instructor(s); amount and frequency of revision expected for writing assignments; and other related considerations.

Synchronous Online and Dual-Mode Delivery¹

In addition to the student-instructor ratio recommendations for online asynchronous courses, synchronous online and dual-mode courses require attention to logistical considerations for live teaching sessions. The primary facilitation concerns for these formats are the cognitive load for students and instructors, as well as the instructors' ability to interact meaningfully with the entire class (Benshoff & Gibbons, 2011; Mallon et al., 2023, Raes et al., 2020).

SLU's <u>Criteria Matrix for Approving Synchronous Online and Dual-Mode Courses</u> (which Deans use to determine whether these formats are appropriate for a given context) indicates a general target of no more than 20-25 students enrolled in a synchronous online or dual-mode course. This target class size is based on recommendations from SLU faculty with experience teaching in these formats prior to the COVID-19 pandemic, the literature for online asynchronous courses, and the emerging literature specific to these distance course formats.

The emerging literature on effective class size for synchronous online and dual-mode formats is currently limited and equivocal. For synchronous online sessions, literature suggests limiting class size to 15 or fewer students or, in the least, smaller groups than the typical in-person class enrollment for maximum pedagogical value (de Salamanca, 2018, Mallon et al., 2023, McDaniels et al., 2016). Dual-mode courses include students both in person, in a classroom setting, and students "Zooming into" those in-person class sessions. The recommended class size for both in-person sections and online sections combined ranges from ten to eighteen (Parker White et al., 2010), though SLU faculty who have taught in these formats recommended slightly higher ranges. In both synchronous online and dual-mode formats, class sizes also depend on classroom technologies and the number of instructional roles (e.g., TAs or co-instructors) assigned to a course (Parker White et al., 2010).

In general, synchronous online and dual-mode courses should have relatively small numbers of students participating remotely, to allow instructors the ability to see all students on a computer screen at the same time and to facilitate real-time discussions and other course activities in ways that are equitable for all students enrolled in the course. As the literature settles regarding courses offered in these formats, these Guidelines will be updated.

References

Benshoff, J. M. and Gibbons, M. M. (2011). Bringing Life to e-Learning: Incorporating a Synchronous

¹ According to the University Policy for Distance Education, a *synchronous online course* is one in which all members of the course – the instructor(s) and all registered students – meet via web conferencing technology on specific days/times for 75% or more of the class sessions during the term. A *dual-mode course* is one for which some students register and attend class in person and some students register and participate in the in-person class via web conferencing technology for 75% or more of the class sessions during the term.

Approach to Online Teaching in Counselor Education. <u>Professional Counselor</u>, 1(1), pp. 21–28.

de Salamanca, C. (2018). Design a synchronous learning environment that promotes community, interactivity, and equity. In B. Chen, A. deNoyelles, & A. Albrecht (Eds.), <u>Teaching Online Pedagogical</u> <u>Repository</u>. Orlando, FL: University of Central Florida Center for Distributed Learning.

Grandzol, C. J., & Grandzol , J. R. (2010). Interaction in online courses: More is not always better. <u>Online</u> <u>Journal of Distance Learning Administration</u>, *13*(2).

Ko, S., & Rossen, S. (2010). <u>Teaching online: A practical guide</u>. New York: Routledge.

Mallon, S., Richards, C. and Rixon, A. (2023). Student and teacher experiences of online synchronous learning. Journal of Applied Research in Higher Education, Vol. ahead-of-print No. ahead-of-print.

McCarthy, S. A., & Samors, R. J. (2009). Online learning as a strategic asset. APLU-Sloan National Commission on Online Learning. Retrieved from http://sloanconsortium.org/publications/survey/index.asp.

McDaniels, M., Pfund, C. & Barnicle, K. (2016) Creating Dynamic Learning Communities in Synchronous Online Courses: One Approach from the Center for the Integration of Research, Teaching and Learning (CIRTL). <u>Online Learning</u>, 20(1), pp. 110–129.

Orellana, A. (2006). Class size and interaction in online courses. <u>The Quarterly Review of Distance</u> <u>Education</u>, 7(3),229–248.

Palloff, R. M., & Pratt, K. (2007). <u>Building online learning communities: Effective strategies for the</u> <u>virtual</u> <u>classroom</u>. San Francisco: Jossey-Bass.

Parker White, C., Ramirez, R., Smith, J., & Plonowski, L. (2010). Simultaneous delivery of a face-to-face course to on-campus and remote off-campus students. <u>Techtrends</u>. 54(34-40).

Rovai, A. P. (2002a). Building a sense of community at a distance. <u>International Review of Open and</u> <u>Distance</u> <u>Learning</u>. 3(1), 1-16.

Rovai, A. P. (2002b). A preliminary look at the structural differences of higher education classroom communities in traditional and ALN courses. <u>Journal of Asynchronous Learning Networks</u>, 6(1): 41-56.

Swan, K. (2002). Building learning communities in online courses: The importance of interaction. <u>Education</u>, <u>Communication</u>, <u>& Information</u>, 2(1), 23-49.

Taft, S.H., Perkowski, T., & Martin, L.S. (2011). A framework for evaluating class size in online education. <u>The Quarterly Review of Distance Education</u>, 12(3), 181-197.