Doctoral Student Policy Handbook

Debby and Jerry Ivy College of Business

Iowa State University

Academic Year 2023-2024

Contents

I.   Ph.D. Degree Requirements

Program Structure

The Ph.D. program is guided by a college level Ph.D. Program Committee, which consists of the department Ph.D. Area Coordinators and chaired by the Director of Graduate Education (DOGE) for the Ph.D. program. The Ph.D. program builds on a set of six foundational courses in the business disciplines. Beyond this foundation, the Ph.D. program consists of two or more years of coursework and a dissertation. The coursework is in three interrelated areas – a series of required and/or elective courses in the major area of specialization (Marketing, Information Systems and Business Analytics, Supply Chain Management, Entrepreneurship, Finance, or Management), three or more courses in a minor area (e.g., economics, psychology, etc.), and a variety of additional courses on research methodology and statistics. The overall course requirements for these areas are summarized in the following table.

Modules	Courses	Credits
Major Area of Specialization	6	14
Minor Area	3	9
Research Methods	4	12
Electives	3	9
Dissertation Credits (BUSAD 6990)		12
Other Relevant Electives or Dissertation Credits		18
Total	**16**	**74**

Students may enter the program with varying levels of preparation. The difference in preparation may arise for several reasons: (a) whether the student has completed a master's degree; (b) whether the student's background is a business or a non-business field; and (c) the type of institution from which the student has completed prior academic work.

Students who enter the program with prior graduate-level coursework may transfer up to 18 credits of graduate credits from their prior program(s). See section on "Transfer Credits" for details. The courses eligible for transfer will be decided by the student's Area Committee, in consultation with the DOGE. If the student's Area Committee determines that specific foundational graduate-level courses are required for that student to be successful in the program, they may add these courses to the student's program of study in consultation with the DOGE. Undergraduate courses may not be transferred.

General Program Timeline

Year 1	- Coursework
	- Annual student evaluation
	- Summer research practicum I
Year 2	- Coursework
	- Take OECT (if needed)
	- Submit POSC form (fall semester)
	- Annual student evaluation
	- Summer research practicum II
	- Comprehensive exam
Year 3	- Research/Teaching
	- Annual student evaluation
Year 4	- Research/Teaching
	- Annual student evaluation
	- Dissertation proposal defense
Year 5	- Research/Teaching
	- Annual student evaluation
	- Final dissertation defense

Sample Course Schedules:
- [Entrepreneurship](#)
- [Finance](#)
- [Information Systems and Business Analytics](#)
- [Management](#)
- [Marketing](#)
- [Supply Chain Management](#)

Ph.D. students who have completed the foundation requirements will take a total of 44 credit hours during the first two years of the program. Except for two credits of research practicum, the remaining 42 credits comprise course work in the fields of major(s), minor(s) research methods and others as deemed appropriate by the area committee and the major professor, if the student has chosen one. If scheduled appropriately, a student should be able to complete all course work in five semesters. The dissertation phase is likely to span the next five semesters. This schedule takes into consideration the current teaching schedule used by the different areas and may change depending on exigencies in each area. Students who do not complete the course and overall program schedule listed below in a timely manner may be terminated from the program.

Major Area

Students must select one (or possibly two) major areas of specialization: Entrepreneurship, Marketing, Supply Chain Management, Management, and Information Systems and Business Analytics, and Finance. Each major area requires a student to take at least four 3-credit courses and two 1-credit courses for a total of 14 credits. In addition, all students will take two 1-credit research courses during their first and second summers in the program.

The requirements in the core and elective courses are the prerogative of the faculty members teaching the courses. Most courses will have a research paper requirement, though this will typically be limited to the preparation of a research proposal that may or may not also include details about the research design—including sample, measurement and research method data. The requirement will not include submission of the research work to a conference or journal, though this should be encouraged if the professor sees promise in the student's work.

If a student is unable to complete his/her major area course requirements within the first two years of the program, he or she can opt to sign up for an independent study course with a mentor who is willing to offer the course. This option will enable the student to take his/her preliminary exam after the end of the second year in the program.

Transfer Credits

At the discretion of the Area Committee, and with the approval of the DOGE and the Graduate College, graduate credits earned as a graduate student at another institution or through a distance education program offered by another institution may be transferred if the grade was B or better. Such courses must have been acceptable toward an advanced degree at that institution and must have been taught by individuals having graduate faculty status at that institution. If a student wishes to transfer credits from graduate courses taken at or through another university as an undergraduate student, it is that student's responsibility to provide verification by letter from that institution that those graduate courses were not used to satisfy undergraduate requirements for a degree. (Grades from courses taken at another institution will **not** be included in ISU grade calculations, nor will the grades be displayed on an ISU transcript.)

A transcript must accompany the POSC form in order to transfer credits. The Area Committee may ask for other materials, such as a course outline or accreditation of the institution, to

evaluate the course. Transfer courses not completed when the POSC form is submitted must be completed before the term in which the student graduates. A transcript must then be submitted for review and final approval.

Research Paper Review

In at least one of the seminars in their area of specialization, students will have an opportunity to practice reviewing research articles. Reviewing papers submitted to journals for publication is an important part of academic life and a crucial service to one's academic discipline. Seminar instructors will provide students with a review exercise, through which students will read and review one or more papers and then be able to compare their reviews with those from scholars who reviewed the article as part of an actual review process.

Research Practicum

Students must complete two, 1-credit courses during their first and second summers. The practicum requires students to work on a research project each summer and complete the project before the deadlines assigned by their program area. Project guidelines will be provided by the program area or faculty advisor and may include developing a manuscript or conference submission.

Students will work under a faculty advisor during the two summers. Students are allowed to choose their advisors from willing faculty members. Students can choose different supervisors for the two practicum courses. The research practicum for the second summer may be the foundation for the student's dissertation topic.

The faculty advisor supervising the practicum will assume responsibility for evaluating the student's work and providing a grade and feedback. If the supervisor feels that the quality of work is inadequate, they can give an "incomplete" grade. Students will have until the first day of the spring semester of the subsequent year to remove the incomplete grade.

Minor Area

Students are also required to select a supporting or minor area of study. The minor is a subject area that is distinct from the major area but complements it. Students can select the minor in consultation with members of the Area Committee and the major professor (if the student has already selected one). The minor can be in another major area within the Ivy doctoral program or an area offered in one of the colleges outside the Ivy college. The chosen

minor area is expected to broaden and deepen the student's area of dissertation research.

A faculty member in the minor area will serve on the student's POS Committee. Coursework in the minor must be approved for graduate credit and deemed appropriate by the Area Committee. Examples of relevant minor areas include:

- Marketing
- Supply Chain Management
- Information Systems and Business Analytics
- Management
- Entrepreneurship
- Finance
- Psychology
- Sociology
- Statistics
- Computer Science
- Industrial Engineering
- Economics
- Biological Sciences
- Advertising/Public Relations
- Anthropology
- Cultural Studies

This list is not exhaustive. Students may select an area not listed above that is relevant to their research objectives and interests.

The minor area of study will require a minimum of 9 credit hours of graduate-level courses. This minimum is for satisfying the requirements of the College of Business. There is a difference between an officially recognized minor (such as the Graduate Minor in Statistics), which is awarded by the minor department or program, and the minor area of study required by the Ph.D. Program. If the student wishes to fulfill the requirements for a formal minor that is officially recognized by the University (and that would explicitly appear on the student's transcript), which is awarded by that other minor department or program (e.g., Psychology, Statistics), the student will need to complete all the requirements as specified by that other department.

Coursework for the minor can be drawn from programs inside and outside the College of

Business but excluding the major area of the student. The college does not need a preliminary exam in the minor area.

Research Methods

Ph.D. students need to develop research skills for planning and executing research projects in the areas of literature review, conceptualizing research questions, justifying a research approach and methodology, developing a research design, and selecting specific methods and techniques for answering the research questions. They need to be well versed in the process of theory construction and testing.

Students are required to take at least 12 credits of research methods courses. The following courses are deemed appropriate for meeting the research methodology requirement. Most of the courses are offered outside the College of Business, often in the departments of statistics or psychology. This list is not exhaustive. Students will therefore have the option of taking courses not on this list, if approved by the DOGE or the Area Committee.

This list is current as of March 4, 2019. As departments can and do change their offerings, students should work with their advisor or POS chair to confirm courses are appropriate for the research methods requirement.

Students are advised to take courses at all levels—4000, 5000, and 6000—instead of loading up at the lower levels.

Statistics

STAT 3410   Introduction to the Theory of Probability and Statistics I
STAT 3420   Introduction to the Theory of Probability and Statistics II
STAT 4020   Statistical Design and the Analysis of Experiments
STAT 4040   Regression for Social and Behavioral Research
STAT 4070   Methods of Multivariate Analysis
STAT 4210   Survey Sampling Techniques
STAT 4320   Applied Probability Models
STAT 4510   Applied Time Series Analysis
STAT 4570   Applied Categorical Data Analysis
STAT 5010   Multivariate Statistical Methods
STAT 5030   Exploratory Methods and Data Mining
STAT 5110   Statistical Methods II
STAT 5120   Design of Experiments
STAT 5210   Theory and Applications of Sample Surveys

STAT 5220 Advanced Applied Survey Sampling
STAT 5420 Theory of Probability and Statistics I
STAT 5430 Theory of Probability and Statistics II
STAT 5440 Bayesian Statistics
STAT 5510 Time Series Analysis
STAT 5540 Introduction to Stochastic Processes
STAT 5870 Statistical Methods for Research Workers (required for statistics minor)
STAT 5880 Statistical Theory for Research Workers (required for statistics minor)
STAT 6010 Advanced Statistical Methods
STAT 6120 Advanced Design of Experiments

Sociology

SOC 5110 Research Methodology for the Social Sciences
SOC 5120 Applied Multivariate Statistics for Social and Behavioral Sciences
SOC 5130 Qualitative Research Methods
SOC 6130 Structural Equation Models for Social and Behavioral Sciences

Psychology

PSYCH 4400 Psychological Measurement I
PSYCH 5080 Research Methods in Applied Psychology
PSYCH 5220 Scientific Methods in Human Computer Interaction
PSYCH 5420 Applied Psychological Measurement

Anthropology

ANTHR 5310 Ethnographic Methods

Computer Science

COM S 5550 Simulation: Algorithms and Implementation

Industrial Engineering

I E 4130 Stochastic Modeling, Analysis and Simulation
I E 4480 Manufacturing Systems Engineering
I E 5100 Network Analysis
I E 5190 Simulation Modeling and Analysis
I E 5340 Linear Programming
I E 5830 Data Mining

Economics

ECON 5000 Quantitative Methods in Economic Analysis

ECON 6010   Microeconomic Analysis I
ECON 6030   Microeconomic Analysis II
ECON 6710   Econometrics I
ECON 6720   Econometrics II
ECON 6730   Microeconometrics
ECON 6740   Macroeconometrics

Preliminary Examination (Comprehensives) in the Major and Research Methods

The preliminary or comprehensive exam has two parts: 1) a written qualifying exam, and 2) a preliminary oral exam. The latter is required by the Graduate College. The former is a requirement of the Ivy College of Business.

The qualifying exam may be given at any time after the student has completed his/her coursework in both the major and research methods. The preliminary exam will rigorously test a student's knowledge of the major subject area, as well as the student's ability to analyze, organize, and present subject matter relevant to the field. It will also test the method skills of the student and assess if the student has the methods rigor and knowledge needed for execution of research ideas.

Qualifying Written Exam:

The qualifying written exam will include eight or more questions relating to the major area and research methods. Students will be required to answer at least six questions, two of which are related to research methods. The written exam will be conducted in a space under the supervision of an examiner. Questions for the qualifying written exam will be developed by the Area Committee, in consultation with the faculty who are responsible for the major area courses, the major professor, and others as deemed appropriate. Although the final evaluation will be the responsibility of the Area Committee, they will seek help of the faculty writing questions and/or experts in the assessed area, including the major professor, to evaluate the student's written exam and provide feedback.

Preparing for the Written Qualifying Exam: The Area Committee can share with the student the names of the faculty that may be writing preliminary exam questions. The student can then contact faculty and obtain from them a reading list, but the exam questions are typically based on the syllabus of the course the student took from the faculty. *A readings list is optional.*
If multiple students from an area take the written qualifying exam at the same time, the Area Committee members and faculty teaching doctoral seminars along with the major professors of those students will prepare the written exam questions jointly. The group will decide if

customization is needed based on the set of courses taken by the students and the methods content that is relevant for each student's research program. The Area Committee will determine the length of time allotted for the exam with 6 hours being the standard.

Questions for the methods section will be prepared by the Area Committee members. The Area Committee may seek the help of both internal and external faculty (particularly the faculty teaching the research methods class inside the college) in constructing the questions. If the student has declared an official statistics minor, then the methods questions must be prepared and graded by a faculty member from the Statistics Department.

Evaluation of the qualifying written exam will be performed by each member of the Area Committee and other persons who wrote questions, as well as the major professor. Faculty on the Area Committee are encouraged to discuss their evaluations of the qualifying written exam with the student prior to the preliminary oral examination; talking with them is a good way to prepare for the oral examination.

The qualifying written exam grading will be based on four possible outcomes: Pass, Conditional Pass, Fail with the option of taking the exam again, and Fail with dismissal from the University. The final decision will be based on a majority opinion of the Area Committee.

Conditional Pass: If a student receives a grade of conditional pass, it is up to the Area Committee to determine the conditions that must be met for the student to pass the exam. Typically, a student may be asked to rewrite one or two questions (but no more than two) from the written exam, where the student's performance was judged to be unsatisfactory. In the case of a rewrite, the student will be asked to respond to the same question and in the same manner in which the written exam is conducted. The student will perform the rewrite, on a laptop provided by the COB, while alone in a designated space. The student will be given up to two hours to perform each rewrite. The Area Committee will evaluate the rewritten responses. In some cases, the Area Committee may also require an additional oral exam as a condition.

Preliminary Oral Exam:

The preliminary oral examination should be scheduled after the student has successfully passed the written qualifying exam. There has to be at least three months between approval of the POSC and the preliminary oral exam. No more than three weeks should pass between the date of the student passing the qualifying written exam and the date of preliminary oral exam. The student must apply to the Graduate College to take the preliminary oral exam by completing

the "Preliminary or Final Oral Exam Request" form online.

The student's POSC will conduct the preliminary oral examination. It is up to the discretion of the POSC chair as to whether others are allowed to attend the exam. The POSC members may ask questions that are not related to the written qualifying exam but are related to the content of courses taken in the major of the student or methods courses the student has completed. The preliminary oral exam typically does not cover the student's minor. However, in the case where the student has declared an official university minor (such as Statistics), one of the POSC members is from the department offering the minor, and that faculty member will examine the student from the perspective of the minor.

At the end of the preliminary oral examination, the POSC will deliberate and make a decision. There are four possible outcomes: Pass, Conditional Pass, Fail with the option of taking the exam again, and Fail with dismissal from the University. The final decision will be based on a majority opinion of the POSC, as dictated by Graduate College policy.

Each part of the comprehensive exam, the written qualifying exam and the preliminary oral exam, can be taken a maximum of two times. A student may earn a failing grade on the written qualifying exam and be given the opportunity to take the exam a second time for the part in which a failing grade was received, as outlined previously. The preliminary oral examination will not be conducted until after the written qualifying exam is administered for the second time (if needed). In instances in which a student fails the initial preliminary oral exam, a second oral exam can be scheduled. The second/repeat preliminary oral exam must be retaken within a one-year span after taking the first oral exam or the student will be terminated from the Ph.D. program. The Graduate College dictates that at least six months must pass between exams.

Forming a Program of Study Committee:

The Graduate College requires a student to have their POSC approved no less than three months before they plan to sit for the preliminary oral exam. For Ivy College of Business Ph.D. students, this means POSCs should be approved no later than June 1 to sit for the preliminary oral exam in September, and December 1 for the March oral exam. Students should be aware that the approval of a POSC takes time. The application is completed and routed online. It goes first to the DOGE as an FYI. Then it goes to the major professor for approval. Once the major professor approves, it is routed to the rest of the committee for approval. It then returns to the DOGE for approval. Finally, the Graduate College reviews the application and either approves it or rejects it. If rejected, the POSC application will need to be revised by the student and

resubmitted, and the entire online approval process will start again. This process can take several weeks, depending on the committee members and their attention to the POSC. Students should plan accordingly.

II.   Program of Study and Committee (POSC)

The POS Committee can be set when a student has narrowed their field of research and study.[1] As per the Graduate College guideline, **the POSC form must be approved at least three months before the preliminary oral exam**. The student will select a major professor who will recommend to the student other members of the POS Committee.

To select a POS Committee, the following procedure has to be followed:

- Identify your department or program's POSC requirements and deadlines (in addition to those of the Graduate College).
- Go to https://www.grad-college.iastate.edu/posc/ for instructions on submitting your POSC form. Once submitted via Access Plus, the form must be approved by the Committee members and the Program's Director of Education (DOGE).
    - A paper practice form is available here:
      https://iastate.app.box.com/s/yf0tipr0a3ztzivuge8k4x8zxv1xqhsv
- After submission, check the status often, and send email reminders to faculty who seem slow to respond.
- Check to make sure it is approved by the Graduate College.

The major responsibilities of the POS Committee are:

- Evaluate and approve the student's program of study
- Conduct the preliminary oral examination
- Advise a student during the development of the dissertation
- Read and approve the dissertation
- Conduct the final oral examination or thesis defense

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[1] The Area Committee will guide students with course related issues and assume responsibility for creating and administering the Written Preliminary Exam. During this time, the Area Committee will guide the student in selection of research areas and development of a program of study. They will also take on the task of reviewing periodically the progress of the student. The Area Committee can advise students on how best to prepare for the preliminary exams in the major area.

The Graduate College Handbook provides a detailed description of the roles and responsibilities of the POS Committee. It spans areas such as procedures, research and dissertation, major professor's relationship with the student and resolution of problems that may arise in the relationship. It also describes the role of the committee member in these areas. Please refer to Chapter 6.4 of the Graduate Handbook.

POS Committee Makeup

The Major Professor

The major professor serves as chair of the POS Committee and must be a member of the graduate faculty in the student's declared major.

Co-Major Professors

A student may decide to select a co-major professor for the following reasons:

- When a student has a co-major or joint major, each of the major fields must be represented by a different major professor
- When a student's dissertation work requires expertise from more than one professor
- If the major professor resigns or retires from the university, they may continue to serve, but a co-major professor who is a member of the graduate faculty must be appointed

When a student has co-major professors, both will have to sign and approve all required forms of the Graduate College.

Members of the Committee

Any graduate faculty member may serve as a member of a student's POS Committee. Members could also be drawn from the student's minor area and from among the faculty that has taught a research methods course. If an official graduate minor has been declared, a graduate faculty member from the minor area must serve on the POS Committee.

Non-Voting Members

When a non-member of the Graduate Faculty has expertise that is relevant for a student's dissertation, he or she may be appointed to the POS Committee as a non-voting member

Size

The POS Committee for a doctoral program should have at least five members of the graduate faculty. It must include three members, including the major professor, from the student's major area. It must include members from different fields of emphasis (minor, research methods) so as to ensure diversity of thought and perspectives.

POS Committee Changes

Students can change the make-up of the POS Committee to meet their evolving research interests. Recommendations for changes in the POS Committee must have the approval of the student, major professor, DOGE, and all committee members involved in the change before seeking approval of the Graduate College. Committee members who are on Faculty Professional Development Assignment, retired or resigned do not have to sign the change form. Changes can be made online through Access Plus. These changes must be approved by the Dean of the Graduate College.

Developing the Program of Study

The student should complete the POSC form as early as possible. The form will list the complete set of courses the student will take during the program. Courses will need to be selected to correct deficiencies in academic preparation and allow study of subject matter in the major and minor areas chosen by the student. Courses will also be selected from the research methods area and which will provide a solid foundation for designing and implementing research projects.

The student can complete the POSC form with the help of the Area Committee. In cases where the student has made an early decision on their major professor, the POSC form can be completed in consultation with the major professor. Thus, the role of the Area Committee is restricted to only those students that have not made a decision on the major professor.

POSC forms are available online through AccessPlus under the Student tab, Graduate Student Status. The POSC form is approved by the student, committee members, and the DOGE. When the Graduate College has approved the POSC, the status of POSC approval can be checked in the AccessPlus Student tab. Approving parties are notified by e-mail when a form is ready for their approval. A practice POSC worksheet can be found on the Graduate College website under "Committee Appointment & Program of Study (POS)": https://www.grad-college.iastate.edu/student/forms/

III.   Dissertation

Dissertation Format

Students can take one of two approaches to the dissertation. The first approach is a multi-paper model. Under this model, students can submit dissertation work as multiple separate but interrelated papers. These papers must have a common focus and be of a quality that the Dissertation Committee feels would be suitable for submission to appropriate academic journals. Each paper must contribute significantly to existing body of research; and there should not be considerable overlap in the material covered in these papers. Co-authored papers, with the student as the lead author are acceptable. The second approach is the traditional dissertation wherein the student works on a single major idea and empirically validates the study hypotheses or addresses a set of research questions to great depth.

Proposal Defense

Students are required to take an oral dissertation proposal defense within one to two years before the student's proposed dissertation defense date. The purpose of the proposal defense is to provide an early assessment of a student's proposed dissertation research topic. The dissertation committee will specifically evaluate the suitability of the proposed topic as well as the student's preparation to conduct the proposed research and the viability of the research methodology.

Two weeks prior to the defense, a dissertation proposal document should be submitted to the POS committee. This proposal should include the following:
- Title page: proposed title of dissertation; name of student; date of submission
- Abstract: a 50 to 100 word abstract that specifies the nature of the problem to be pursued, objectives of the study, and data and methods to be employed
- Introduction and Justification: A specific statement of the problem as a researchable issue, its managerial and theoretical relevance, its relationship to past and present research, specific gaps that it fills in the literature
- Literature Review: Discussion of the pertinent literature and placing the proposal in the context of the literature
- Theory Development, Hypotheses, and/or Model Setup: Development of a conceptual model, choice of supporting theory or theories, development of hypotheses to be tested, justification of model assumptions, etc.
- Methodology: Discussion of the proposed research design along with sample and method details

- Timetable: a timetable for milestones to be reached during dissertation research, including research, data collection, analysis and writing phases
- Bibliography: listing the works that most clearly relate to the study as sources of theory, data or methodology

Proposals prepared for two- or three-essay dissertations will have a different layout, which may include a separate outline for each essay.

The POS committee of the student will assume full responsibility for the proposal defense. The proposal defense can only be taken twice. The second defense must be taken within one year of the first defense. Failure to pass the second time, as decided by the POS committee, will lead to the student's termination from the Ph.D. program. The proposal defense may be open to the public or closed, at the discretion of the POS Committee.

Dissertation Defense

All Ph.D. degree candidates must pass a final dissertation defense (or final oral examination). The final defense must be held by the final oral examination deadline date for the semester in which the degree is granted.

Graduate students should register at Iowa State University for the course GR ST 6810B (Final Exam) if no course work is needed, during the semester in which the final dissertation defense is taken.

The following conditions must be met before the "Final Oral Exam Request" form is submitted to the Graduate College:

- Full admission status,

- Approved POS form with all coursework completed or in progress,

- English requirement met (for nonnative English speakers),

- Not on probation,

- Time limit not exceeded,
- Approved "Report of Final Oral" & "Graduate Student Approval" forms,

- "Application for Graduation" form (diploma slip) submitted,

- Registered for term in which final oral examination is taken for GR ST 6810B (Final Exam) if no course work is needed,

- Overall G.P.A. above 3.00, or petition filed and approved stating extenuating circumstances,
- 24 credits earned in residency during 2 consecutive semesters and 1 summer session or at least ½-time employment at ISU (see Chapter 4 for residency information), and

- A minimum of six months between the preliminary oral and final oral examinations. The Ph.D. final defense, required by the Graduate College, is conducted after the dissertation is finished, is oral and limited to a defense of the dissertation. To receive the degree at the end of a given semester, the student must hold the final defense before the final oral examination deadline for the semester.

The candidate is responsible for initiating the "Final Oral Exam Request" form, which must be submitted to the Graduate College at least **three** weeks before the examination. The candidate must submit copies of the manuscript to members of the POS committee at least **two** weeks before the examination. A committee member who does not receive the thesis at least two weeks before the final oral examination may cancel the examination.

The entire POS Committee must be convened for the final oral examination. Any request to change the makeup of the committee needs to be submitted in writing to the Graduate College and approved by the Dean of the Graduate College before the final oral examination is held. The request must be signed by the student, all committee members involved in the change, and the DOGE. With the approval of the major professor and concurrence of the candidate, interested faculty members and graduate students may attend final oral examinations and, at the invitation of the major professor, may ask questions.

In some cases, it may only be possible to convene the committee in a timely manner if one of the committee members participates at a distance. This is permitted if the distance participation is agreeable to all committee members, if the mode of communication permits the full participation of the committee member at a distance, and if the Graduate College is notified in advance of the examination with the "Preliminary or Final Oral Examination with Committee Member at a Distance" form. The preferred method of distance participation is video conferencing, but speaker phone is acceptable in cases where visual presentation is not critical. The distant committee member must participate for the entire examination.
This final exam can only be taken twice. As per Graduate College requirements, the candidate has a maximum of five years from the date of passing the preliminary examination to take the final oral examination and deposit the dissertation. Failure to take the final oral examination

within a maximum of five years after passing the preliminary examination requires the candidate to take another preliminary examination and be admitted to candidacy a second time.

IV. Key Program of Study Evaluations

Although laid out in the different sections of the handbook, the evaluations a student will go through during the program are summarized in this section.

Research Practicum – Summer I: Students will work on a research topic in their respective major areas and complete the project before the deadlines assigned by their program area. Project guidelines will be provided by the program area or faculty advisor and may include developing a manuscript or conference submission. The faculty advisor supervising the practicum will assume responsibility for evaluating the student's work and providing a grade and feedback. If the supervisor feels that the quality of work is inadequate, they can give an "incomplete" grade. Students will have until the first day of the spring semester of the subsequent year to remove the incomplete grade.

Annual Student Evaluations: The College conducts an annual evaluation of each Ph.D. student in the spring of each year. The evaluations are conducted by the Area Committees for the first two years. Evaluations are performed by the major professor after the second year since students will also have teaching responsibility. Students are required to submit a completed progress report and a current c.v. for the evaluation process and meet face-to-face with either the Area Committee or his/her major advisor. The structured evaluation process is discussed in more detail in the Appendix, where there is also a flow chart that illustrates the timing.

Research Practicum – Summer II: All students are likely to have completed their major course prerequisites by the spring semester of the second year. Students will work on a research topic in their respective major areas and complete the project before the deadlines assigned by their program area. Project guidelines will be provided by the program area or faculty advisor and may include developing a manuscript or conference submission. The faculty advisor supervising the practicum will assume responsibility for evaluating the student's work and providing a grade and feedback. If the supervisor feels that the quality of work is inadequate, they can give an "incomplete" grade. Students will have until the first day of the spring semester of the subsequent year to remove the incomplete grade. This research practicum could be the foundation for the student's dissertation topic.

Comprehensive Examination: Students will undergo a comprehensive exam in their major area of specialization and research methods at the end of the second year and start of the third year. There are two parts to the exam. The qualifying written exam will be conducted in a classroom under the supervision of an examiner, with six hours allocated. This exam will be prepared and evaluated by the student's Area Committee, in consultation with the faculty who are responsible for the major area courses, the major professor, and others deemed appropriate. If the student passes, then they will take the preliminary oral exam, which will be administered by the POSC, as required by the Graduate College. There can be no more than three weeks between the successful passing of the written qualifying exam and the preliminary oral exam. Both parts of the comprehensive exam are described in more detail elsewhere in the Handbook.

Dissertation Proposal Defense – Admission to Candidacy: Students are required to take an oral dissertation proposal exam within one to two years before the student's proposed dissertation defense date. The purpose of the proposal defense is to provide an early assessment of a student's proposed dissertation research topic. Two weeks prior to the defense, a dissertation proposal document should be submitted to the POS committee. The POS committee of the student will assume full responsibility for the proposal defense. The proposal defense can only be taken twice. The second defense must be taken within one year of the first defense. Failure to pass the second time, as decided by the examination committee, will lead to the student's termination from the Ph.D. program.

Final Dissertation Defense: The Ph.D. final oral examination is required by the Graduate College and will be conducted after the dissertation is finished. It is oral and limited to a defense of the dissertation. To receive the degree at the end of a given semester, the student must hold the final oral examination before the final oral examination deadline for the semester. The candidate is responsible for initiating the "Request for Final Oral Examination" form, which must be submitted to the Graduate College at least **three** weeks before the examination. The candidate must submit copies of the dissertation manuscript to members of the POS committee at least two weeks before the examination, as required by the Graduate College.

V.   Teaching Responsibility

The experience of teaching is viewed as an integral part of graduate student training for the Ph.D. degree in Business and Technology. The College of Business is strongly committed to training its Ph.D. students to become high quality teachers. This commitment to quality will not

only enhance placement opportunities for the student, it also will ensure that undergraduate students receive excellent instruction.

Ph.D. students are <u>required to teach three sections during the third and fourth years but</u> can start as early as their second year of the program if they are eligible. Ph.D. students are required to teach two sections during their fifth year. Teaching will typically be at the undergraduate level. Teaching may be limited to the principles course in each discipline but may cover other areas depending on the background and experience of the Ph.D. student. Students may be given the option of teaching multiple courses during the three semesters to expand their teaching portfolio. This will be done only at the request of the student.

Students are <u>required</u> to take the Center for Excellence in Learning and Teaching (CELT) Teaching Symposium before they begin their teaching duties. The CELT Training Symposium is offered once a year (in August). The Symposium Goals are:

- To learn about policies, practices and resources that affect teaching and learning at Iowa State University.
- To become familiar with common student issues, successes and be able to guide students to various campus resources.
- To discover the services, resources and development opportunities provided by CELT.

Before taking direct responsibility for teaching, students will be assigned a teaching mentor by the department chair in their fourth semester. Students may be required to sit in on a course taught by the mentor and learn teaching points through observation. The mentor may also ask the student to teach one or more class sessions and will provide feedback on the student's teaching style and effectiveness.

The student's major professor will be responsible for evaluating the student's teaching at least once per semester through a peer review process. The professor will provide feedback to the student about their teaching performance.

International students are <u>required</u> to meet the University minimum requirements for English language proficiency prior to teaching a course. The Oral English Certification Test (OECT) combines OPI and TEACH scores to give results at one of 4 levels of English oral proficiency. You must receive Level-1 full certification, or you are expected to take English 1800 during or before your first semester on appointment. It is recommended for students to take this exam the summer before their second year.

Graduate students whose native language is not English, and whose English proficiency test scores fall below the minimum required for exemption, must take the English Placement Test unless they meet one of the other exemption criteria (see the appendix.)

VI.   Student Performance Evaluation/Academic Requirements

Students have to show at all times "satisfactory progress" in the program. Evidence of such progress includes maintenance of a minimum 3.0 cumulative grade point average each term. If a student fails to maintain the 3.0 minimum cumulative GPA, they will be placed on probation. Students placed on probation must raise their performance to reach a 3.0 minimum cumulative average within two successive terms following the term in which the deficiency occurred. Failure to meet this requirement will subject the student to dismissal at the discretion of the Area Committee. A student can be dismissed from the program without a probationary period if they receive two or more course grades of C or below; this decision is at the discretion of the Area Committee. Failure to meet expectations for assistantship appointments is also grounds for dismissal at the discretion of the Area Committee. Graduate students must have a minimum 3.0 cumulative GPA in order to graduate.

Annual Student Performance Evaluations

The College of Business conducts an annual evaluation of each Ph.D. student. The aims of the annual evaluation are twofold: (a) provide constructive feedback to the student and (b) enable the College to monitor the progress of students and take appropriate action when necessary. The evaluations are conducted by the Area Committees for the first two years. Evaluations are performed by the major professor after the second year since students will also have teaching responsibility. The evaluations consider the progress of the student in research, teaching and service. Students that receive an unsatisfactory overall progress evaluation in their annual review may be dismissed from the program at the discretion of the Area Committee and the DOGE.

A structured evaluation process appears in the Appendix. This process was approved by the Ph.D. Program Committee in Spring 2022.

Completion Time

Students are expected to complete the program in five years. The College provides 4 years of funding, and a 5th year with adequate progress in the program. In rare cases, a student may need

a sixth year to complete his/her degree. If a student needs to stays beyond the fifth year, the terms of stay will be negotiated between the student and the funding sources and requires approval of the DOGE and Dean's office. The College will provide office space to a sixth-year student only when space is available.

VII. Travel Funding

1. Purpose
Students are strongly recommended to present their research work at top conferences in their respective fields. To help support participation in these conferences, travel funding is provided by each department to their PhD students.

2. Coverage

The amount to be allotted to each student is determined by the area coordinator/committee. How the funds can be used is also determined by the area coordinator/committee. Some examples of how the funds can be used include conference registration, travel and lodging expenses, and membership in the major area's primary conference organization. **Rental cars are not reimbursable.** You can reserve a car from the ISU Transportation fleet. Students are advised to seek out additional funding opportunities to help supplement provided travel funds. For example, students are eligible to apply for a $200 PAG grant each year through the Graduate and Professional Student Senate.

3. Application Process

To obtain funding, students must complete the "COB Travel Approval Form" and send it via email to their area coordinator for approval prior to making travel arrangements for the trip and registering for the conference. Students must adhere to the travel reimbursement policies of their academic department. Expenses that appear to be excessive will not be reimbursed. Students must follow the business travel guidelines set forth by the University.

VIII. Dissertation Grant

Any doctoral student in the College who has successfully passed the preliminary oral exam is eligible for a dissertation research grant. Up to $4,000 may be granted to an approved application, and each student is eligible for one dissertation grant, regardless of the format of the dissertation and research.

The fund can be used for all data collection and experiment-related activities, including payment to subjects, labs, assistants, and third parties; materials and supplies to complete experiments; and travel to and from data collection sites (travel and lodging costs only).

The fund cannot be used for travel to conferences, pre- or post-dissertation research projects, or subsidizing other research projects of the student or the advisors.

The doctoral student initiates the application. The standard application form is available in the appendix.

The POS Committee reviews and either approves, denies, or recommends change to the grant application. If approval is recommended, the POS chair signs off the application and forwards it to their Ph.D. Area Coordinator for review.

The Ph.D. Area Coordinator reviews and either approves, denies, or recommends change to the grant application. If approved, the Ph.D. Area Coordinator signs off on the application and forwards it to the Ph.D. Student Services Specialist, who will then send to the Fiscal Officer for processing.

The POS chair supervises the expense of the grant, which is administered by the home department of the student.

IX.   Ph.D. Student Research Grants (PSRG)

1. Purpose

- Encourage Ivy College of Business doctoral students to pursue publishable papers prior to their dissertation proposal
- Doctoral students often have research ideas while they are taking coursework but are unable to pursue them because of lack of funding

2. Coverage

- Each doctoral student is eligible for one grant before defending his/her dissertation proposal. Only doctoral students who received "Satisfactory, with no concern" on their last annual evaluation are eligible. Students must have a completed and approved POS.
- Maximum of $2,000 per grant.
- Papers completed using this grant CAN be included in the dissertation.

- The fund can be used for all data collection and experiment-related activities, including payment to subjects, labs, assistants, and third parties; materials and supplies to complete experiments; and travel to and from data collection sites (travel and lodging costs only).
- The fund cannot be used for travel to conferences or subsidizing other research projects of the student or the advisors.

3. **Application Process**
- All proposals must include a letter of support from the student's major professor (as indicated on the POS form and an indication that IRB materials have been appropriately submitted).
- Proposal: Maximum of 2 pages, 12-point font, single-spaced, and 1-inch margin on all sides. Must include a title, information on research problem, significance of the research, the anticipated contribution of the research, data source, timeline, a detailed budget and justification, and target outlet.
- The Ph.D. Area Coordinator reviews and either approves, denies, or recommends changes to the proposal. If approved, the Ph.D. Area Coordinator signs off on the application and forwards it to the Ph.D. Student Services Specialist, who will then send it to the Fiscal Officer for processing.
- Proposals can be submitted anytime, and if approved, funds must be spent within one year.

4. **Supervision**

- The POS chair supervises the expenses, which will be administered by the home department of the student.

X.   **Purchasing/Reimbursement Processing**

Type of Reimbursement	Requires Invoice/Receipt	Forward to Staff Member
Travel expenses	Yes	finance_delivery@iastate.edu
Non-travel expenses (service related: copy editing, data collection)	Yes	Budget and Finance Specialist
Non-travel expenses (established platforms: Amazon, Prolific)	No	Department Admin

XI.   Updating this Handbook

The College of Business Ph.D. Program Committee is responsible for maintaining and revising this handbook. Future revisions will be approved by the Director of Graduate Education after providing them to the PhD Committee for review. No other approvals are required.

Appendix A

PhD Student Forms:

Annual Ph.D. Student Evaluation

Ph.D. Student Summer Research Awards

Dissertation Grant Policy

      - Application for Dissertation Research Grant

Ph.D. Student Research Grant (PSRG) Policy

      - Application for Ph.D. Student Research Grant (PSRG)

Travel Funding Policy

      - Travel Reimbursement Form

      - Ph.D. Student Travel Approval Form

Appendix B

Testing of Nonnative English Speaking Students

Test #1: Oral English Certification Test (OECT) for International Teaching Assistants (ITAs)

Graduate students who do not speak English as their first language are required to take the Oral English Certification Test (OECT) (https://cce.grad-college.iastate.edu/speaking/oect-for-itas/overview) in any of the following situations:

- they have been offered a teaching assistantship
- they will have some teaching responsibilities even if they are not teaching assistants, e.g. an occasional discussion leader, a substitute presenter, etc.
- they are applying to the Preparing Future Faculty (PFF) or Graduate Student Teaching Certificate (GSTC) Programs.

This language test measures the ability to use spoken English for teaching purposes and is different from the English Placement Test (EPT) that measures general academic English proficiency. This test is administered by the Center for Communication Excellence, Graduate College. The OECT levels are used to make language proficiency-based recommendations to academic departments and graduate programs regarding their students' teaching duties. Students who do not receive OECT certification, i.e. test at OECT Level 2, 3, or 4, are required to take GR ST 5400 which will provide them with English language support as necessary. These English courses must be completed during the first year of study, and registration holds are placed if the student does not register for these during the first two semesters from the time of appointment.

Graduate students who speak English as their first language can seek an exemption if they reside in certain countries where English is the official language. Additionally, graduate students can seek an exemption if they present TOEFL, IELTS, or PTE results that fall within the OECT exemption criteria (see https://cce.grad-college.iastate.edu/speaking/oect-for-itas/candidates).

Instructions and test registration dates are available at https://cce.grad-college.iastate.edu/speaking/oect-for-itas/schedule.

For questions about the OECT, please email itas@iastate.edu.

Test #2 English Placement Test (EPT) for all international graduate students

Graduate students whose native language is not English and whose English proficiency test scores fall below the minimum required for exemption, *must take the English Placement Test unless they meet one of the other exemption criteria. **This test is administered by the Department of English. Students must take the EPT at the beginning of their first semester of enrollment. Students who do not pass the EPT are placed into one or more courses in the English 0990 or 1010 series. These English courses must be completed during the first year of study, and registration holds are placed if the student does not register for these during the first year of study.

 *English proficiency test scores required for exemption from the EPT:

- Minimum TOEFL PBT score of 600, or TOEFL iBT score of 100
- Minimum IELTS Academic score of 7.5
- Minimum PTE (Pearson Test of English) Academic score of 72

 **Additional exemption criteria, course fees, and other information about the test can be found at https://apling.engl.iastate.edu/english-placement-test.