

Institutional Effectiveness 2023-2024

Program: Foreign Languages BA

College and Department: Department of Foreign Languages (DFL)

Contact: Martin Sheehan

Mission:

The Department of Foreign Languages (DFL) is proud to offer foreign language courses, study abroad experiences, and co-curricular opportunities that prepare Tech graduates to compete in today's global marketplace. The major in foreign languages (with concentrations in French, German, or Spanish) cultivates foreign language proficiency and cultural understanding in our students to equip them for success in a wide variety of careers and for postgraduate studies. Students may also double major, earn a minor (in French, German, Spanish, or International Studies), or become an International Business and Cultures (IBAC) major, a joint degree between the College of Business and the College of Arts and Sciences. The DFL also assists in training the next generation of foreign language teachers for K-12 classrooms across the state, region, and country.

Furthermore, the DFL offers numerous Culture and Civilization courses (taught in English) that support the intercultural education of TTU students. These courses allow students to fulfill Tech's general education: humanities elective while developing their analytic and presentational skills. Through our English as a Second Language (ESL) courses, the DFL supports Tech's diverse population of international students as they seek to attain sufficient linguistic competency in English in order to be successful in ENGL 1010 and subsequent coursework at Tennessee Tech. Furthermore, we organize symposia, film series, lectures, and cultural events in order to foster international awareness and cultural understanding within the Tech community.

The DFL is committed to developing, providing, and promoting study abroad experiences for majors and non-majors. Thanks to its FLST 1011 and 1013 courses, the DFL is a major support for all Tech students seeking to learn languages abroad that are not regularly offered at Tech.

The ongoing mission of the Department of Foreign Languages is to foster the multilingual proficiency, intercultural understanding, and professionalization of Tennessee Tech students through our foreign language courses, our culture and civilization courses, and the cultural activities that we offer to our stakeholders throughout the year. In this way, we directly support TTU's Tech Tomorrow Strategic Plan by:

- developing, providing, and promoting experiences that emphasize diversity and build global awareness (Goal 1 - Education for Life)
- implementing and continually improving our technologically infused instruction at all levels in order to enhance foreign language and cultural learning (Goal 2 - Innovation in All We Do)

- creating distinctive programs that aim to improve our students' marketability in today's multicultural environment in a manner that is increasingly effective and efficient (Goal 3 - Exceptional Stewardship, Goal 4 - Engagement for Impact).

Working in concert with the national World-Readiness Standards for Learning Languages of the American Council on the Teaching of Foreign Languages (ACTFL), the DFL strives to provide quality education to our Majors in foreign languages and to our non-Majors. Our program learning outcomes align closely with these standards and stipulate that our students will be able to communicate effectively in oral and written modes in the target language, interpret culturally authentic texts, and exhibit intercultural competency.

Attach Curriculum Map (Educational Programs Only):

Attached Files: See Appendix 1

PG 1: Graduation Rate

Define Outcome:

The DFL will recruit, retain, and graduate enough students to achieve an average of 13 graduates over the course of each academic year.

Assessment Methods:

The DFL tracks the number of majors each semester, where our current majors are in their academic pipeline, and the number of graduates each semester. This data is recorded in the annual departmental report, which is prepared, disseminated, and discussed at the first department meeting each academic year in August. The faculty then use this report to brainstorm new recruitment and retention strategies for the academic year.

Criteria for Success (Thresholds for Assessment Methods):

Programs that graduate less than an average of 10 majors over a period of 5 years can be classified as low producing and risk elimination. Thus, our aspirational target performance would be an average of 13 graduates over a 5-year period because that figure would indicate the growth and strength of our programs.

Threshold of acceptability:

- Target Performance: an average of 13 graduates over 5-year period
- Minimum Performance: an average of 8 graduates over 5-year period

Link to 'Tech Tomorrow' Strategic Plan:

3.A Efficiency and Effectiveness

Results and Analysis:

Enrollments for Foreign Languages, Fall

	2019	2020	2021	2022	2023	Change 2019-2023
First Major	23	29	23	17	14	-9
First and Second Majors	47	38	37	40	37	-10

Foreign Language Degrees Conferred

2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	5-year average
9	5	14	12	6	9.2

For 2023-2024, the department had 6 graduates with a 5-year average of 9.2. This average is above our minimum performance threshold of 8 and below our target performance threshold of an of 13 graduates.

Use of Results to Improve Outcomes:

This planning year saw the Foreign Languages Department settling into a new location on campus. Despite the extra resources that a departmental move across campus requires, the faculty nevertheless managed to plan and execute some new strategies to attract, retain, and graduate majors. Specifically, the DFL organized two meet-and-greet events during the academic year to welcome students into the new department spaces, including one of our larger classrooms as well as the Euro Cafe (our student lounge and event space). Alongside these events at the beginning of each semester, the department held two receptions targeted at high-performing students in our language courses. At least four majors were recruited during these events.

Besides these internal recruitment and retention events, the majority of faculty members participated in the Fall Preview Day event on campus. Unlike in previous years, this event unfortunately did not yield the same amount of incoming Freshmen to our department. When presented with this data, the faculty discussed ways to initiate and continue communication with the prospective students who come to this and other similar events. The chair has created a voucher for our placement exam, which will be distributed along with other promotional materials to prospective students. Additionally, the faculty are developing email templates to aid with follow-up communication with prospective students.

Based on these results, and at the behest of the Provost, the department is currently developing a multi-pronged strategy to increase its future fall enrollments, which will subsequently impact the 5-year average of graduates. During the 23/24 AY, the department streamlined its curriculum and expanded the maximum total of Prior Learning Credit it will award qualified students. It is hoped that the more focused curriculum will help us explain our degree requirements to prospective majors, while simultaneously making earning dual degrees from Tech more manageable. The increased Prior Learning Credit will allow qualified students to more quickly complete the requirements for a minor in Foreign Languages, which we hope will lead to more advanced students double majoring.

In addition to these catalog adjustments, we are also updating our messaging. The faculty have adopted a new slogan for the department--"Cultures, Connections, Careers"--to attract more students by articulating the many career paths that foreign language proficiency can open. We are developing posters that showcase careers that require varying levels of foreign language ability. We plan to distribute these posters to world language teachers across the state so that younger students start to associate Tennessee Tech with languages.

Throughout the whole 24/25 AY, the DFL will be developing and executing more external recruitment plans to improve on these metrics so that we can achieve the associated program goal.

PG 2: Culture and Civilization Courses (Gen Ed)

Define Outcome:

The DFL will aim to offer 5 English-language culture courses each academic year in order to contribute diverse courses to the general education core at Tech.

These courses are: FLST 2520: The Cultures and Peoples of North Africa, FREN 2510: French Culture and Civilization, GERM 2520: German Culture and Civilization, SPAN 2510: Spanish Culture and Civilization, and SPAN 2550: Latin American Culture and Civilization.

Assessment Methods:

When the chair prepares the annual institutional effective report, they will track the number of fine arts/humanities courses the department offers each year, as well as the total number of students enrolled in each course each semester to identify enrollment trends. This information will be shared with faculty during the first faculty meeting in the fall.

Criteria for Success (Thresholds for Assessment Methods):

Threshold of acceptability

- Target Performance: 5 cult/civ courses per year
- Minimum Performance: 2 cult/civ courses per year

In 2014, the Provost's office expressed the need for more general education: fine arts/humanities courses to be offered to TTU students. If at least 1 course is offered a semester, then a total of 2 courses will be offered during the academic year, which corresponds to the the minimum performance. The target performance would mean at least 1 cult/civ course being offered over the summer in addition to 2 courses offered each fall and spring.

Link to 'Tech Tomorrow' Strategic Plan:

1.B General Education Curriculum,1.C Diversity

Results and Analysis:

Culture and Civilization Courses

	2019-2020	2020-2021	2021-2022	2022-2023	2022-2023
Total # of Culture and Civilization Courses	2	3	3	7	8

For 2023-2024, the department greatly exceeded its minimum performance threshold of 2.

Use of Results to Improve Outcomes:

The number of general education culture courses that we offer each year has increased steadily. Faculty have developed versions of these courses that are focused on experiential learning (i.e., study abroad trips for our French culture course and a musical performance component for a Latin American cultures course), which will hopefully raise the profile of the department on campus. The department is fine tuning its messaging for non-majors in these general education courses in hopes of encouraging a higher percentage to enroll in our language courses or declare a minor/major in foreign languages.

Two concerns arose as faculty reflected on the number of culture courses offered each year: 1) whether there is a saturation point at which the average enrollment for these courses starts to drop and 2) whether students tend to enroll more often in face-to-face sections of these courses or online sections. If the data suggest that face-to-face sections offer a better return on investment, then we will plan to offer more on-campus versions when possible and appropriate.

SLO 1: Foreign Language Proficiency

Define Outcome:

By their senior year, all foreign language majors will be able to confidently demonstrate their proficiency in their targeted language by scoring at least 75% overall on the senior capstone paper/presentation rubric. A score of 75% or higher demonstrates that a student's language ability is at a proficient or advanced level

Assessment Methods:

Senior Capstone Paper/Presentation Rubric – All our majors complete a senior capstone experience that culminates in a research presentation in the language. This presentation is evaluated by department faculty via a rubric. The rubric was developed to examine and improve students' level of speaking proficiency in their targeted language. The rubric aligns with the American Council on the Teaching of Foreign Languages (ACTFL) and evaluates 6 areas of proficiency. Students will demonstrate the ability to:

- Create comprehensible oral output (i.e., their thoughts, ideas, and opinions) in the target language (Advanced-Low level minimum as described by ACTFL)
- Create comprehensible written output (i.e., their thoughts, ideas, and opinions) in the target language (Advanced-Low level minimum as described by ACTFL)
- Analyze and evaluate authentic material in the target language in its written and spoken forms (Advanced-Low level minimum as described by ACTFL)
- Analyze, apply, and evaluate assumptions, concepts, and theories to provide valid responses, conclusions, or recommendations
- Compare and evaluate the relationship between the products, practices, and perspectives of the cultures of the target language and the student
- Apply and justify the use of the language beyond a school setting, including in a professional setting

Students are evaluated on all 6 areas of the rubric and results are evaluated to determine proficiency and identify areas of strength and weakness. Students will score at least 75% overall, thereby demonstrating a Proficient or Advanced level.

Faculty will attend and evaluate each capstone presentation, given by majors in their respective language--i.e., French faculty will attend the French capstones, German faculty the German capstones, and Spanish faculty the Spanish capstones. Each faculty member in attendance (with expertise in the language) will complete a rubric for each presentation. Completed rubrics will be submitted to the chair by the end of each semester. The chair will digitize each submitted rubric, record each score, and determine whether the 75% of capstone students meet or exceed the required threshold. The digitized rubrics will be stored electronically.

Attached Files: See Appendix 2

Criteria for Success (Thresholds for Assessment Methods):

Senior Capstone Paper/Presentation Rubric: students will score at least 75% overall on the senior capstone paper/presentation rubric.

Link to 'Tech Tomorrow' Strategic Plan:

1.A Experiential Learning,1.D High Impact Practices,2.B Research, Scholar, Intellect, and Creativity,3.A Efficiency and Effectiveness

Results and Analysis:

SLOs 1: Foreign Language Proficiency

	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024
Total # of Capstone Students	10	5	14	7	7
# that met minimum performance threshold of 75%	8	4	13	5	7
# that did not meet minimum performance threshold of 75%	2	1	1	2	0
% of Students meeting minimum performance threshold of 75%	75%	80%	93%	71%	100%

With 100% of students meeting the minimum threshold of 75% on their Capstone presentations, the department exceeded its minimum performance threshold of 75% for 2023-2024.

Use of Results to Improve Outcomes:

The department met its target threshold of 100% for this past year. A curricular change might have positively impacted these data. Specifically, the department no longer restricts heritage speakers (that is, students who grew up speaking the language of study) from enrolling in the 3020 course (Oral Communication in French/German/Spanish).

Previously, it was decided that heritage speakers, who tend to be more proficient in speaking the language of study than in writing it, would benefit more from taking a different upper-level course. Recently, SPAN 3020 in particular was updated to include more professional presentation projects that are similar in format to the capstone presentation. Now that heritage speakers can take 3020, they can hone their presentation skills, which consequently might be leading to better performance in our capstones.

The faculty continue to employ previously reported actions towards improvement, specifically, discussing the presentation rubric early in each capstone course and encouraging rising seniors to attend each semester's capstone presentations in their language of study in order to showcase what a capstone research project looks like.

SLO 2: Teacher Licensure Program and edTPA Performance

Define Outcome:

Foreign language majors seeking teaching licensure will demonstrate content and pedagogical knowledge and skills by meeting or exceeding a passing score on the respective performance-based subject-specific assessment as set by the State Board of Education.

Assessment Methods:

The edTPA is a performance-based, subject specific assessment that measures teaching-based skills related to planning, instruction, and assessment. Students in the foreign language program must complete the World Languages performance task. The edTPA is professionally scored by Pearson, and the Tennessee State Board of Education sets candidate cut scores.

The results are disseminated by Tech's College of Education in the early fall each year.

Criteria for Success (Thresholds for Assessment Methods):

Threshold of acceptability

- Target Performance: The total mean score for licensure students taking the World Languages edTPA exceeds Tech’s cut score (AY 23/24=?)
- Minimum Performance: The total mean score for licensure students taking the World Languages edTPA is at least Tech’s cut score (AY 23/24=?)

Link to 'Tech Tomorrow' Strategic Plan:

1.E Stackable Credentials,4.B Programs, Certificates, and Training

Results and Analysis:

(AWAITING SCORES FROM EDUCATION)

edTPA results

	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	2023-24		
	TTU	TTU	TTU	TTU	TTU	TTU	TTU	State	National
N=	3	1	1	2	3	8	0	23	547
Planning	3	3	2.8	3.4	3.1	3.1	0	12.3	11.6
Instruction	2.3	2.4	2	2.3	2.1	2.6	0	12.0	12.1
Assessment	2.9	3	3	3.8	2.9	2.7	0	11.6	10.3
Total Mean Score	35.3	36	33	40	34	36.4	0	36.0	34.1

TTU's total mean score this year of XXX is higher than the current cut score of 35 for world languages.

Use of Results to Improve Outcomes:

No TTU students completed the edTPA for world languages during the 2023/2024 academic year. This metric cannot be measured.

Dr. Michael Olsen, the teacher licensure coordinator for our department, was consulted about these numbers. In past years, job-embedded students would need to complete the edTPA for certification, but that requirement was dropped last year. Therefore, we do not have as many TTU-affiliated edTPA test takers as we have had in past years.

Also, although none of our seniors completed the edTPA last year, three are expected to during the 2024/2025 AY.

List of Appendices:

Appendix 1: Foreign languages BA Curriculum Map

Appendix 2: SLO1 Assessment Methods

Appendix 1: Foreign Languages BA Curriculum Map

Appendix 1: Foreign Language Curriculum Maps

German

Learning Outcomes (I=Introduce, R=Reinforce, M=Mastery, A=Assessment Opportunity)	REQUIRED COURSES									
	Foreign Language, German Option 1, Option 2 & German with Licensure, B.A.									
	2010 Intermediate German II	2020 Intermediate German II	3010 Written Comm in German	3020 Oral Comm in German	3112 German Civ/Cult	3150 Intro German Lit	4810 Special Topics	Upper Division	Upper Division	4920/4925 Capstone
Oral Communication Create comprehensible output in the target language (spoken) (Intermediate-Mid level minimum as described by ACTFL)	I	I	R	R, A	R	R	M	M	M	M, A
Written Communication Create comprehensible output in the target language (written) (Intermediate-Mid level minimum as described by ACTFL)	I	I	R, A	R	R	R	M	M	M	M, A
Interpretive Communication Analyze and evaluate authentic material in the target language in its written and spoken	I	I	R, A	R, A	R	R	M	M	M	M, A

forms (Intermediate-Mid level minimum as described by ACTFL)										
Intercultural Competency Compare and evaluate the relationship between the products, practices, and perspectives of the cultures of the target language and the student.	I	I	R	R	R	R, A	M	M	M	M, A
Communities Apply and justify the use of the language beyond a school setting, including in a professional setting	I	I	R	R	R	R	M	M	M	M, A
Critical Thinking Analyze, apply, and evaluate assumptions, concepts, and theories to provide a valid response, conclusion, or recommendation	I	I	R	R	R	M,A	M,A	M,A	M,A	M,A

Spanish

Learning Outcomes (I=Introduce, R=Reinforce, M=Mastery, A=Assessment Opportunity)	REQUIRED COURSES									
	Foreign Language, Spanish Option 1, Option 2 & Spanish with Licensure, B.A.									
	2010	2020	3010 Oral Comm in French	3020 Written Comm in Spanish	4010/4020 Intro Lit of Spain/ Latin America	4110/4120 Cult/Civ of Spain/ Latin America	Upper Division	Upper Division	Upper Division	4920 Capstone
Oral Communication Create comprehensible output in the target language (spoken) (Intermediate-Mid level minimum as described by ACTFL)	I	I	R	R, A	R	R	M	M	M	M, A
Written Communication Create comprehensible output in the target language (written) (Intermediate-Mid level minimum as described by ACTFL)	I	I	R, A	R	R	R	M	M	M	M, A
Interpretive Communication Analyze and evaluate authentic material in the target language in its written and spoken forms	I	I	R, A	R, A	R	R	M	M	M	M, A

(Intermediate-Mid level minimum as described by ACTFL)										
Intercultural Competency Compare and evaluate the relationship between the products, practices, and perspectives of the cultures of the target language and the student	I	I	R	R	R	R, A	M	M	M	M, A
Communities Apply and justify the use of the language beyond a school setting, including in a professional setting	I	I	R	R	R	R	M	M	M	M, A
Critical Thinking Analyze, apply, and evaluate assumptions, concepts, and theories to provide a valid response, conclusion, or recommendation	I	I	R	R	R	M,A	M,A	M,A	M,A	M,A

French

Learning Outcomes (I=Introduce, R=Reinforce, M=Mastery, A=Assessment Opportunity)	REQUIRED COURSES Foreign Language, French Option 1, Option 2 & French with Licensure, B.A.									
	2010 Intermediate French I	2020 Intermediate French II	3010 Written Comm in French	3020 Oral Comm in French	3100 French Phonetics	3110 Survey French Lit I	3120 Survey French Lit II	3112 Cult/Civ of France	Upper Division	4920 Capstone
Oral Communication Create comprehensible output in the target language (spoken) (Intermediate-Mid level minimum as described by ACTFL)	I	I	R	R, A	R	R	R	M	M	M, A
Written Communication Create comprehensible output in the target language (written) (Intermediate-Mid level minimum as described by ACTFL)	I	I	R, A	R	R	R	R	M	M	M, A
Interpretive Communication Analyze and evaluate authentic material in the target language in its written and spoken forms (Intermediate- Mid level minimum as described by ACTFL)	I	I	R, A	R, A	R	R	M	M	M	M, A

Intercultural Competency Compare and evaluate the relationship between the products, practices, and perspectives of the cultures of the target language and the student	I	I	R	R	R	R, A	M	M	M	M, A
Communities Apply and justify the use of the language beyond a school setting, including in a professional setting	I	I	R	R	R	R	M	M	M	M, A
Critical Thinking Analyze, apply, and evaluate assumptions, concepts, and theories to provide a valid response, conclusion, or recommendation	I	I	R	R	R	M,A	M,A	M,A	M,A	M,A

Appendix 2: SLO1 Assessment Methods

Capstone Rubric

Master's Thesis/Research Rubric

Advanced Candidate _____ Chair of Committee: _____ Date: _____

Committee Members: _____

Reader: _____ Date: _____

Elements	Unacceptable (0-3)	Acceptable (4-7)	Target (8-10)
APA - Alignment with Reference List	Consistent citing mistakes were made within body of the proposal including references in text but not on reference list and/or items on reference list and not cited in document (at least three). Electronic sources were incorrectly cited in the text and/or on the reference list. Et. al. was used incorrectly or inconsistently throughout the body of the document. Consistently reviewer had difficulty finding cited in text references on the reference list.	While there may have been minor errors, conventions for APA style and format were used consistently throughout the document. Less than two references in the document were not on the reference list or vice versa. The majority of electronic sources were cited correctly and could be found on the reference list. Et. al. was consistently used appropriately with less than three errors in the proposal. Reviewer found minor inconsistencies between citing in the text and on the reference list.	The proposal consistently models the APA language and conventions used in the scholarly/professional literature appropriate for publication. Electronic sources were identified correctly within the document and on the reference list. Original sources were clearly identified and correctly cited in both the body of the text and the reference section. Et. al. was consistently used appropriately with no errors in the document. Reviewer found all cited sources on the reference list.
Reference List	There were at least ten citing mistakes on the reference list and a general failure to follow APA convention. This included references out of alphabetical order, incomplete reference information, incorrect identification of sources, incorrect sequence within individual references, and various mistakes in convention.	There were minor mistakes on the reference list (less than five) and generally APA conventions were followed. Reference list was in alphabetical order, complete reference information was provided, and only minor mistakes in convention such as a misplaced period.	There were less than two mistakes on the reference list and all APA conventions were followed.
Mechanics	Grammatical conventions were generally used, but inconsistency and/or errors in their use resulted in weak, but still apparent, connections between topics in the formulation of the argument. There were poor uses of transitions, which failed to allow the to identify the sequence within the subheading. The review of literature section consisted of a string of summaries of the various studies with no attempt to integrate similar studies.	While there may have been minor errors, the proposal followed normal conventions of spelling and grammar throughout. Errors did not significantly interfere with topic comprehensibility. Transitions were effectively used which help the reviewer move from one point to another. Some attempt was made to integrate similar studies and to compare and contrast findings.	The proposal was essentially error free in terms of mechanics. Writing flowed smoothly from one idea to another and led the reviewer through an orderly discussion of the topic. Transitions effectively established a sound scholarly argument and aided the reviewer in following the writer's logic. Similar studies were integrated and findings were compared and contrasted.
Required Format	Consistent mistakes were made in the required format. These may have included margins, spacing, page numbering, typeface, and headings that failed to comply with APA conventions. Format mistakes were found on the Title page and in the Table of Contents.	There were minor mistakes in the required format that did not interfere with the readability of the proposal. Margins, typeface, spacing, and page numbering were correct. There were minor mistakes with headings, Title page, and/or Table of Contents.	There were less than two mistakes in the required format. Margins, typeface, spacing, page numbering, and headings followed the required format. There were minor mistakes with the Title page and/or Table of Contents.

Content Knowledge	Ideas presented closely follow conventional concepts with little expansion and development of new directions. Ideas and concepts were generally and satisfactorily presented although lapses in logic are apparent. Theory was minimally applied to the context of the question. The research design did not align with the research question.	Response was organized, carefully focused and clearly outlined the major points related to the question. Ideas were logically arranged to present a sound scholarly argument. Depth of understanding related to physical education, sport or physical activity was evident. Theory was accurately applied contextually to the question. Research design aligned with the research question.	The thesis/project excelled in the organization and representation of ideas related to the question. Depth of understanding was apparent and clearly related to the field of physical education, sport or physical activity. The response synthesized theoretical concepts and coherently applied them to the question's specific context. The research design aligned with the research question and provided more than one method of analyzes.
Literature Review	Related literature was summarized. The gaps in current knowledge and approaches that fill these gaps were not identified. The literature review was minimally connected to the study's methodology and measures. The research design and method of analysis were not appropriate for the research problem. Related research was not synthesized or integrated. Sub-headings were not used or used incorrectly. Literature review was incomplete and failed to explore the depth and scope of the available literature.	Related literature was credibly summarized. The gaps in current knowledge were identified, and directions and approaches that fill these gaps were identified. The literature review was connected to the study's methodology and measures. The research design and method of analysis were appropriate for the research problem. Sub-headings were effectively used to categorize related research. Literature review was comprehensive in both depth and scope.	Important issues or ideas were raised, which may not have been represented in the literature cited. The gaps in current knowledge were clearly identified, and significant directions and approaches that fill these gaps were identified. The literature review was clearly connected to the study's methodology and measures. The research design and method of analysis reflected a sophisticated understanding of the research problem. Subheadings were used effectively and transitions were provided between subheadings. Literature review was comprehensive and extensive.
Results	The study's results section was not supported by the literature review and only partially related to the research question(s) or hypothesis(es). There was no sequence to the reporting of the results and data tables lack clarity.	The study's results section referenced the review of literature. The results were directly related to the research question(s) or hypothesis(es). The reporting of results followed a logical sequence. Data tables were clearly labeled and accurately reported the findings. For each analysis the name of the statistic used was reported along with p values, SD, etc. as appropriate for the statistical procedure used in the study.	The study's results were thoroughly and logically explained and directly related to the review of literature. The results were directly related to the research question(s) or hypothesis(es) and were reported in logical segments. Data tables were clearly labeled, accurate, and well designed for easy of understanding. For each analysis the name of the statistic used was reported along with p values, SD, etc. as appropriate for the statistical procedures used in the study. The results section had maximum clarity.
Discussion	The discussion is minimally supported by related literature. Findings are summarized, but not interpreted (candidate simply repeats the findings in the results section). The discussion fails to place the findings in context or include implications for future studies.	The discussion is supported by related literature and findings are compared and contrasted to other studies included in the review section. Findings are interpreted using some statistical jargon. Results are placed in context and implications for future research are identified.	The discussion is supported by related literature, findings are compared and contrasted, and theoretical connections are made to your research results. Findings are interpreted using a minimal amount of statistical jargon. Implications and future directions are identified.
Supervision	The finish project/thesis required numerous drafts (10-15) on the part of the advanced candidate. Candidate would make limited corrections on each draft and depended on the advisory to provide specific input. Draft would be returned with just the edited corrections. Candidate failed to demonstrate independent problem solving skills or to think critically about the project/thesis. Candidate relied on the advisor for the development of the main research question/hypothesis.	The finish project required several drafts (5-9), but the candidate made more than specific edits. Candidate demonstrated the ability to accept feedback from the advisory and make the necessary changes. Candidate did demonstrate independent problem solving and critical thinking skills throughout the project/thesis. The candidate did develop an appropriate main research question/hypothesis with guidance from the advisory.	The finish project required minimal drafts (5 or under) and candidate demonstrated the ability to use feedback to make improvements beyond the editorial comments. Candidate demonstrated critical thinking, problem solving, and analytical skills throughout the project/thesis. Candidate independently developed an appropriate main research question/hypothesis.

Adapted from California State University, Fresno, Department of Biology