CLASIC
Graduate Student Handbook
Supplement to the University of Colorado Boulder Graduate School Rules

**Computational Linguistics, Analytics,
Search and Informatics (CLASIC)**

**University of Colorado Boulder
303.492.2159
Fleming 283
294 UCB
Boulder, Colorado 80309**

clasic_contact@colorado.edu
https://www.colorado.edu/linguistics/graduate-program/computational-linguistics-clasic-ms

CLASIC Graduate Student Handbook

This Handbook is a resource for graduate students in the Computational Linguistics, Analytics, Search and Informatics Professional Master's program, an interdisciplinary degree jointly offered by the Departments of Linguistics and Computer Science at the University of Colorado Boulder. **Those policies and requirements in effect at the time of your matriculation will apply to you during your course of study here.** If there are revisions to the requirements while you are enrolled, they will *not* apply to you retroactively unless you specifically make that request.

All students are bound by both Departmental requirements and **Graduate School requirements**, which are separate. Make sure you understand both sets. Authoritative information on Graduate School requirements is given in the Graduate School web pages https://www.colorado.edu/graduateschool/ and the Graduate School section of the University Catalog https://catalog.colorado.edu/ . Use the Catalog and the Handbook for the year you entered until you graduate, since together they govern your graduation requirements.

You can find additional general information by searching the University's website. Current courses offerings are available in Campus Solutions registration. Course descriptions are provided in the online catalog, in the registration system and by individual instructors. Before registering for courses each semester, consult your advisor.

This handbook should answer your questions about the rules and requirements of the program for your degree. This information is also available on our website. In case you have questions or are unclear about the rules, it is best to talk to your advisor.

Table of Contents

1. Introduction

This handbook outlines the rules and requirements for your degree program. This information is also available on our website. If you have questions or are unclear about the rules, please talk to the Program Coordinator.

Program Coordinator

Kristine Stenzel is the CLASIC Program Coordinator, a part-time position. She is your first point of contact any time you have questions, problems, or need some help in any matter related to your studies.

Contact information:
Email address: **clasic_contact@colorado.edu**
Phone: 303-492-2159 (until Spring 2022)
Office: FLMG 283 (until Spring 2022)
Office Hours for Drs. Palmer and Brown will be determined each semester. CLASIC office hours may vary by semester and are subject to adjustments for other activities. For Fall 2021, the Program Coordinator will usually be in the CLASIC office Tuesday 12 - 4pm & Wednesday 9am - 4pm. You may email at any time during regular business hours; this is the quickest form of contact!

2. Facilities

2.1 Access

CLASIC offices are currently in the Fleming building but will be moving to Buchanan for Spring 2022 semester.
Students have access to some of CLASIC's rooms in Fleming, but there is no dedicated study room.
280 – copy machine
281 – small group meeting space
286 – faculty office and lab meeting space
If you need a key access any of these rooms, you can request it from Cynthia Clark Cynthia.clark@colorado.edu , in the Linguistics Department. She can order keys for new students who have an active Buff One Card, and you can normally pick it up the next day at Access Services in Folsom Stadium.

2.2 Copy Machine

Students may use the program's copy machine located in Fleming 280. Use of the copy machine is for academic purposes only. You should not copy books or any other material that violates copyright laws.

3. Goals of the CLASIC Program

The **Computational Linguistics, Analytics, Search and Informatics Professional Master's Degree (CLASIC)** is a unique interdisciplinary degree between the Departments of Linguistics and Computer Science. The field of computational linguistics, or natural language processing, is burgeoning and has fantastic career opportunities at companies such as Google, Facebook, Amazon, Apple, and more.

The program is intended to:

- Provide a solid foundation in computer science, data-driven linguistics and natural language processing graduate course work.

- Educate graduates to be specialists in the application of computers to the processing of natural languages, such as English, Chinese, Arabic and Urdu.

- Teach validated machine learning approaches, including deep learning, either with or without linguistic annotation as training data, and extend them to new domains and new genres, as well as new linguistic phenomena using appropriate evaluation methodologies.

- Prepare students for jobs in the field of computational linguistics, also known as text analytics, natural language processing, and informatics, a field critical to the success of mainstream global businesses who compete for employees qualified to address these needs.

Coursework Alone is not Sufficient for a Degree

Students are expected to take responsibility for their own education. You are encouraged to seek advice from faculty members and make requests concerning special interests or plans (e.g., individual study with faculty members). Students are also encouraged to interact with each other and with faculty members. Your own work, through research, reading, attending academic talks, participating in scholarly meetings, completing an internship, and interacting with other computational linguists, is essential to building the intellectual curiosity and knowledge expected of someone holding an advanced degree.

4. Advising

Your advisor helps verify that you are taking the proper courses to satisfy both the CLASIC program and University requirements and to meet your personal career goals. You should always talk to your advisor about any issues that may be affecting your work. If you have a problem that your advisor cannot help you to handle, he or she will help you to find the resources you need.

Advisors:

Susan.Brown@colorado.edu, Associate Director
Martha.Palmer@colorado.edu, Director
(Beginning Jan. 2022) Jim.Martin@colorado.edu, Computer Science Faculty

The Record of Progress

The Record of Progress is a checklist of requirements to help you track your progress and record decisions about your individual plan of study. During the first conference with your advisor, you will begin filling out the Record of Progress form. The form will be consulted and updated at each subsequent advising session.

5. The CLASIC Professional Master's Program

The CLASIC Professional MS requires 32 credit hours of coursework. This includes **8 required courses** (23 credit hours) and **3 elective courses** (9 credit hours). Among the required courses is a 2-credit capstone project that runs in conjunction with an internship or CU Boulder based research project. As part of the capstone, students prepare a technical report on the completed project that the program directors and project leader jointly evaluate. No thesis or final examination is required. Students typically complete the CLASIC degree in two years but may choose to take longer, consulting with the Directors to discuss this option.

The CLASIC Curriculum is shown below and can be consulted online.

5.1. CLASIC Curriculum

Requirements

Students must complete at least 32 hours of approved graduate study, including a 2-credit capstone course. The minimum course grade is a B and the minimum GPA for graduation is 3.0.

Required Courses and Credits

Core Linguistics Courses - 2 of these 3 courses + 1 elective   9 credits

LING 5030	Phonetics
LING 5420	Morphology and Syntax (alt: LING 6450 Syntactic Analysis)
LING 5430	Semantics and Pragmatics

Elective: any advisor approved LING class at the 5000-, 6000- or 7000-level

Core Computer Science Courses - 2 courses   6 credits

CLASIC students are required to take courses from 3 of the 9 different CS areas* to fulfill the "Breadth of knowledge in Computer Science" requirement. Breadth courses are distributed into 3 different CS "bins". Visit the computer science department website for a full list of course options in each of the 3 breadth bins. (Updated every two years.)

The required **Core CLASIC** course **CSCI/LING 5832**: **Natural Language Processing** fulfills the Bin 2 requirement, so students must choose a course from Bin 1 and another from Bin 3.

*CSCI areas: Artificial Intelligence; Database systems; Gen Comp. Science; Graphics; Numerical Computation; Operating systems and Hardware; Programming Languages; Software Engineering; Theory of Computation

Bin 1 (choose one)	
Recommended options:	
CSCI 5454	Design and Analysis of Algorithms
or CSCI 5444	Introduction to Theory of Computation
or CSCI 5714	Formal Languages
CSCI 5606	Principles of Numerical Computation
or CSCI 5646	Numerical Linear Algebra

Bin 3 (choose one)	
Recommended options:	
CSCI 5253	Datacenter Scale Computing - Methods, Systems and Techniques
CSCI 5448	Object-Oriented Analysis and Design
CSCI 5535	Fundamental Concepts of Programming Languages

CLASIC Capstone   2 credits

LING/CSCI 5140	CLASIC Capstone

Core CLASIC Courses - 5 courses: 3 required & 2 electives   15 credits

CSCI/LING 5832	Natural Language Processing (Satisfies CA Bin 2 requirement)
CSCI 7000/LING 7800	Current Topics in Computer Science (Computational Lexical Semantics)
or LING 7800	Computational Models of Discourse (prereq. LING 5832)
CSCI/LING 7565	Computational Phonology and Morphology

Elective Courses - Choose two of the following

CSCI 5417	Information Retrieval Systems
CSCI 5817	Database systems
CSCI 5352	Network Analysis and Modeling
CSCI 5502	Data Mining
CSCI 5622	Machine Learning
CSCI 5839	User-Centered Design & Development 1
CSCI 5922	Neural Networks and Deep Learning
CSCI 6622	Advanced Machine Learning
CSCI 7000	Current Topics in Computer Science (Inference, Models & Simulation for Complex Systems)
CSCI 7222	Topics in Nonsymbolic Artificial Intelligence (Probabilistic Models of Human & Machine Intelligence)
CSCI 7222	Topics in Nonsymbolic Artificial Intelligence (Representation Learning for Language)
LING 5200	Introduction to Computational Corpus Linguistics
LING 5800	Open Topics in Linguistics (Machine Learning and Linguistics)
LING 6300/3800	Topics in Language Use (Formal Models of Linguistics)
LING 6520	Topics in Comparative Linguistics (Computational Grammars)
PHIL 5440	Topics in Logic
PHIL 5460	Modal Logic
Any other CSCI or LING course at the 5000-, 6000- or 7000-level*	
Any Core course listed above (not already taken)	

*The professional internship course CSCI 6930 cannot count as an elective towards program requirements

5.2. Course Load for M.S. Students

Six to nine hours (2-3 courses) is a normal semester course load. All courses taken towards the degree must be at the 5000 level or higher. Students should enroll in all their courses as a Boulder campus student.

5.3. Distance Courses

There is no limit on the number of distance classes a graduate student may take. International students should consult ISSS (ISSS@colorado.edu) for regulations on in-person/distance enrollments.

5.4. Master's Pass/Fail Courses

No graduate courses may be taken for Pass/Fail credit. This includes graduate courses that are transferred into the program. You can take courses for No Credit, but they will not count towards your degree.

5.5. Curricular Practical Training (CPT) & CSCI 6930 Internship Course

This class allows CS/CLASIC graduate students to receive academic credit for professional internships that have an academic component to them suitable for graduate-level coursework. The class may be taken during any term following a student's initial enrollment and participation in the graduate program. Full information can be found on this page: https://www.colorado.edu/cs/graduate-students/computer-science-professional-internship-class.
Please note the following:

- Students must **apply** to be admitted into the class and participation requires an internship agreement between the student, faculty advisor, and an industry partner who will employ the student in a role that supports the academic goals of the internship.

- The agreement form can be found on the CS page above, but CLASIC students should return the form to the Program Coordinator once their advisor has signed it.

- The application process for a given semester will have strict timelines and registration deadlines associated with it. During summer, this class follows Term D deadlines. All requirements must be met to enroll in the course and the application process must be completed and approved **before** you can take the internship. You cannot participate in an internship and then register for this course after the fact.

- **International students** doing internships must also complete the new ISSS Curricular Practical Training (CPT) eform, which can be accessed through the MyISSS portal. Once the student completes their section of the eform, the advisor will receive an email with instructions on how to complete their section of the form. Once completed and approved by ISSS, a copy of this form should also be sent to the Program Coordinator.

6. Resources for Research

6.1. Library Resources

University of Colorado's Norlin Library has an excellent general collection of linguistics books, which are fully accessible in Norlin's open stacks. Books may be checked out or portions photocopied at copy machines. Items that Norlin does not have may be obtained through Interlibrary Loan. You may also notify the Linguistics Department Library Liaison (this changes every year) if you need something that is unavailable so that they can advise the library to buy it for future use. The University Libraries website has a search engine as well as a wide variety of databases and electronic journals: From off-campus, you will need to use the VPN utility so that you can access electronic databases and journals that are licensed for use solely by CU faculty, staff, and students.

6.2. Corpus Facilities

CU Boulder is an institutional subscriber to the Linguistics Data Consortium or LDC, http://www.ldc.upenn.edu, which gives it access to a variety of speech and text corpora (transcriptions and digital recordings of spoken language as well as collected newswire, broadcast news talk shows and weblogs in multiple languages). We also subscribe to COCA at BYU. To access COCA, users just need to create an account with the @colorado.edu email. There should be no issues as long as users log in from on campus or using the VPN which will be authenticated with the Libraries' IP addresses.

These corpora are used in certain courses as well as for individual research. Many LDC corpora are already available to CLASIC students. See current holdings on the Corpus Listing page of the CU Linguistics website, https://verbs.colorado.edu/CUCorpusInfo/. See current LDC holdings on the LDC's catalog page. For more information consult with Ghazaleh Kazeminejad, the Linguistics Department's corpus manager.

6.3. Affiliated Center

The Center for Computational Language and Education Research (CLEAR)
Martha Palmer and Jim Martin, co-directors

CLEAR is dedicated to advancing Human Language Technology. It conducts research and development that informs theoretical questions in human language technology. The Center projects include: adaptive assessment and intervention for reading difficulties; the development of increasingly rich linguistic annotation schemes that can serve as training and evaluation data for machine learning; information extraction and natural language understanding using semantic role labeling and co-reference resolution; spoken language processing and dialog understanding; and human-computer interaction using animated agents or customizable interfaces. These projects have led to a wide variety of systems including some for language acquisition skills, tutoring and therapy, tools for question answering and navigating the web, and for learning and presentation of science topics ranging from plate tectonics to acoustics.

The center holds weekly lab meetings at 10:30 on Weds. in Fleming 279 (through fall 2021), open to CLASIC students. Meetings are called CompSem (short for Computational Semantics).

6.4. The Linguistic Circle is a series of approximately weekly meetings and colloquia in which faculty, advanced students, and visiting scholars speak on current research. LingCircle is generally scheduled for Wednesdays beginning at 4:10 p.m. in GUGG 205, and each talk is announced on the grad students email list. In the spring, as part of the PhD proseminar, LingCircle presentations discuss graduate-school-survival skills and career development strategies. Students can check the Ling website under events for upcoming talks or other events.

6.5 Computer Science Graduate Student Community

Computer Science Colloquia

Students are encouraged to attend as many of the talks in the colloquium series as possible. Talks cover a wide range of research topics and may provide some familiarity with people and projects.

Slack

Slack is one of the primary points of contact for the graduate student community. It is a free messaging service that can be used in a browser or downloaded as an app. Sign up for a Slack account with your Colorado email address at https://boulder-cs-grads.slack.com/.

Channels address topics such as:

- #courses : Great place to ask questions about recommended professors, the amount of work associated with a course, etc.
- #housing : Find a roommate or ask for recommendations on neighborhoods.
- #freefood : Self-explanatory, not very active,
- #games : Board game nights, often organized semi-spontaneously,
- #gsa_planning : Events planning for the Graduate Student Association
- #intramurals : Organizes teams and team captains for the university recreational sports league.

New channels are created all the time for various interests, students of a particular course, upcoming events, etc.

Outside of Slack, Computer Science, and the Computer Science Graduate School Association (CSGSA) also organize a few community events every semester. Reoccurring ones include:

- Welcome back event: Usually at the start of the semester as a chance to meet new students and chat with old friends.
- Friendsgiving: A potluck a few weeks before Thanksgiving.
- Winter Celebration: In early December, this is the fanciest event of the year featuring a catered meal with live performances from students and faculty.
- Graduate Student Research Expo: Students present research in the form of posters and talks.
- Spring Picnic: In May, the department hands out awards and provides food.

These events are usually advertised on Slack and via the department mailing lists: cs-phd@lists.colorado.edu and cs-ms@lists.colorado.edu

If you want to get involved in planning events or you have an idea for an event that you would like to see happen, you should contact the CSGSA (csgsa@colorado.edu)

7. Student Affairs

7.1. Information Sources

The University of Colorado website provides an array of resources pertaining to student life, from transportation to technology services. The Graduate School website also has essential information for graduate students.

7.2. Mailboxes and Email

Graduate student mailboxes are in the hallway near the Department of Linguistics' main office, Hellems 290. Students should check their boxes as well as their university email regularly for Department and Graduate School announcements.

Students are responsible for keeping the CLASIC Program Coordinator informed of changes in their contact information.

7.3. CLASIC Student Association

CLASIC students are added to the CLEAR Computational Semantics (The Center for Computational Language and Education Research) mailing list and are encouraged to attend regular Wednesday 10:30am CompSem meetings in Fleming 279. These meetings and talks offer opportunities to gain familiarity with people and projects. Meetings are not held most of the summer. Students are also added to a computer science email list with information about forums for talks covering a wide range of research topics.

There is currently no CLASIC student association, but anyone who is so motivated is welcome to start one!

7.4. Grievances

Grievances, whether related to individual courses or Program actions, should be brought first to the attention of your advisor or the Directors. If a grievance is not resolved informally to your satisfaction in this way, you may address a formal appeal to the faculty, which will then be considered by a specially appointed committee. Further appeal to the Graduate School may also be made (see the Graduate School Rules for details). The Ombuds Office offers confidential counsel to students at any stage of a grievance.

For grade grievances, if discussions between the instructor and the student have not led to any resolution of the problem, the student shall have the option of making a formal written appeal to the Director. The appeal must be submitted within 45 days of the end of the academic term in which the course was taken, and it must specify the solution desired by the student. The Director or a designee will meet (together or separately) with the student and with the faculty member who taught the course. If the Director/designee is unable to broker a solution mutually acceptable to both student and instructor, then the Director shall appoint an ad hoc Grade Appeals Committee to review the dispute. This committee shall consist of at least three impartial faculty members competent in the subject matter of the course in question. The Director will provide the committee with the student's appeal and a written response from the faculty member. Within 45 days, the committee will submit a report and recommendation to the Director, and the Director will recommend to the instructor either (1) that the originally assigned grade stand; or (2) that a new grade be assigned. In cases where a change of grade is recommended and the instructor does not wish to accept the recommendation of his/her colleagues, the Director shall forward the written materials associated with the appeal to the Dean of the College.

Refer to the **Graduate School Rules.** To communicate concerns related to academic issues or academic conflicts, please refer to the Graduate Student Grievance Process and Procedures, revised 2019.

7.5. Student Government: University Level

The interests of all university graduate students are represented by the Graduate and Professional Student Government (GPSG). GPSG deals with topics including health insurance, childcare, employment,

and campus security, as well as social programming. Linguistics and Computer Science graduate students elect representatives to the GPSG each year. The representatives must attend meetings regularly for the Department graduate students to receive activity funds from GPSG. Find out who your representatives are each year.

8 Financial Aid

8.1. University Financial Aid

To receive University financial aid, domestic students must complete the Free Application for Federal Student Aid (FAFSA) form, available from the Office of Financial Aid and on the FAFSA website.
Additional information about financial aid may be found at the Office of Financial Aid, and Aid for Professional Students. The Graduate School has funding information including National Fellowship Opportunities, and CEAS has a list of External Funding Opportunities for Graduate Students in Engineering.

8.2. Employment

Students in Professional MS programs, such as CLASIC, are not eligible for Teaching Assistantships (TAs), Research Assistantships (RAs), or Graduate Part-Time Instructor (GPTI) appointments.
Part-time hourly jobs as graders or for individual professors may be available once students have arrived on campus. Grading positions are usually announced each semester. Students interested in grading for a computer science course should contact Rajshree Shrestha, Computer Science Senior Graduate Advisor.

8.3. Employment from other Departments

There are occasional opportunities for part-time hourly jobs in other programs, particularly in the Program for Writing and Rhetoric and in foreign language departments.

8.4. Student Employment Office

Remember to check out the Student Employment Office for on-campus and off-campus opportunities. International students can work a certain number of hours per month and must consult with the International Student and Scholar Services Office (ISSS).

8.5. Residency

U.S. citizens and Green Card holders may establish Colorado residency, and are expected to do so, if possible, since financial aid sources cannot reliably cover non-resident tuition. It takes 12 months (minimum) to establish residency. To have your residency status approved, you should:
- register to vote in Colorado;
- register your car in Colorado;
- obtain a Colorado driver's license; and
- pay taxes as a Colorado resident (and as a non-resident of whatever state you used to live in).

Some of these requirements mean that you must take steps when you first move to the state, and **before** the first day of classes your first semester here. Your application for residency may not be accepted if you start this procedure later than the first day of classes. You must complete all the above steps. In addition,

you should keep rent receipts. The actual application should be submitted in the spring of your first year because approval takes some time.

To be granted residency status for tuition purposes, you must apply to the Tuition Classification Office by submitting a Tuition Classification form before the relevant deadline. Information about petitioning for in-state tuition classification, including deadlines, is in the [Tuition Classification Guidelines](#) or at the Tuition Classification Office in the Office of the Registrar, Regent Administration Center, Rm. 101. Be sure to check the deadlines to obtain your resident classification as soon as possible!

International students cannot become Colorado state residents unless they are already qualified permanent residents of the United States.

8.6. Progress Toward the Degree and Financial Aid

The Graduate School requires students to maintain a 3.00 (B) GPA (cumulative grade point average) in all courses taken, whether graduate or undergraduate. If you are not making acceptable progress or meeting the registration requirement, you can petition to be allowed to retain financial aid that has already been awarded to you, but this will only work for a semester or two at the most. Financial aid is very unlikely to be given to students who have several incomplete course grades or who are otherwise not making satisfactory progress towards the degree.

8.7. Sufficient Progress, Probation, Leave of Absence

Students whose cumulative average falls below 3.0 are placed on probation by the Graduate School and will be suspended if their GPA does not reach 3.0 within the time specified by the notice of probation. The CLASIC Program is also given the authority to drop any student who fails to make sufficient progress toward a degree. CLASIC will take no action under this authority without first informing a student of what they must do to resume adequate progress and giving them a fair amount of time to satisfy those requirements. The best way to avoid problems is to maintain regular contact with your faculty advisor.

Students may take a [Leave of Absence](#) from graduate study if personal circumstances are making it difficult to maintain a GPA of 3.0 or if they decide not to take any courses in a particular semester. Discuss this option with your advisor. Failure to register or sign up for a Leave of Absence will result in being dropped from the program. i.e., you would have to reapply and be accepted again to resume your studies.

See the [University Catalog](#), Graduate School, subsection on Credit Policies for additional information about academic probation and suspension, provisions for removal of grades below B by [retaking a course](#) (grade replacement) and I (incomplete) grades.

8.8. Independent Study

CLASIC students may take up to 3 hours of independent study during their academic career. Independent study should be work in an area where the program does not offer a formal course or go more in-depth into a field.

If a faculty member agrees to set up an individual study with you, an Individual Study Contract (obtainable [online](#), see Enrollment Procedures at bottom of page) must be completed and submitted to the CLASIC Director or Associate Director for approval. Individual study is not to be used to duplicate existing courses

(e.g. in a semester in which they are not offered). Two or more students may also participate together in the same independent study.

8.9. Part-time Study

Students admitted to the graduate program are expected to work steadily toward completion of their degree requirements. Part-time study is not discouraged, especially for students with jobs.

9. Grades and Course Credit

9.1. Grades

Graduate School grades are somewhat inflated as compared to most undergraduate grades. Although professors vary in their grading policies, the following is a rough guide as to how grades in M.S. level courses are likely to be interpreted by people evaluating your transcript, e.g., for admission to the Ph.D.:
A   encouragement to doctoral-level study in the field
A-   cautious encouragement to doctoral-level study in the field
B+   good M.S.-level work, cautious about whether study beyond the M.S. is appropriate
B   acceptable M.S.-level work, study beyond the M.S. is probably not appropriate
B-   minimal passing work, study beyond the M.S. is strongly discouraged, and it is likely
       that you are not in the appropriate field of study.

9.2. Credit Policies

See the University Catalog, Graduate School, subsection on Credit Policies for additional information about academic probation and suspension, provisions for removal of grades below B by retaking a course (grade replacement), I (incomplete) grades, and the Leave of Absence Program.

10. Graduation

10.1. Candidacy Application for an Advanced Degree

In order to graduate, you must complete an Application for Candidacy form the semester you intend to graduate.
When completing the Candidacy Application, check the **Degree Plan II** (non-thesis, no exam, degree plan). Once completed, send the form to the Program Coordinator, who will obtain the Advisor's and Director's signatures before sending to the Graduate School for approval.
The filing Graduation Deadlines are listed online (Master's Graduation: Non-Thesis Plan). The Program Coordinator will send an email reminder at the beginning of each term to those anticipated to graduate.

10.2. Applying for Graduation

After the Graduate School accepts your Application to Candidacy, you also must officially **apply to graduate**. In your **MyCUInfo portal**, click on the student tab and then select the 'Apply for Graduation' link in the middle of the page. Follow the instructions to apply for the semester you plan to graduate. If you do not graduate in the semester you originally plan to, you will have to go to your myCUInfo and apply for the following semester.