



DEPARTMENT OF
**BIOCHEMISTRY AND
MOLECULAR BIOLOGY**

College of Agricultural Sciences and Natural Resources

Graduate Student Handbook

Version 2019

Call 911 immediately if a crime, accident, or other emergency occurs. If using a cell phone to dial 911, confirm you that are connected with the Stillwater Police Department.

Other Emergency Contacts

Ambulance	405-744-6523 (On Campus) 405-372-4171 (Off Campus)
Fire	405-744-6523 (On Campus) 405-372-4171 (Off Campus)
OSU Police	405-744-6523 (On Campus) 405-372-4171 (Off Campus)
Student in Distress	405-744-5458
University Health Services	405-744-7665
Stillwater Medical Center (Hospital)	405-372-1480

Safety

If for any reason you are concerned about your safety and do not have a friend to walk with you across campus after dark, the Campus Police at 405-744-6523 are available to provide an escort.

Department of Biochemistry and Molecular Biology

John Gustafson, Department Head	405-744-6189	john.gustafson@okstate.edu
Department Office, 246 NRC	405-744-6189	biochemistry@okstate.edu
Robert Matts, Graduate Program Coordinator	405-744-6200	robert.matts@okstate.edu
Junpeng Deng, Graduate Program Coordinator	405-744-6192	junpeng.deng@okstate.edu
Melissa Hatchett	405-744-6478	melissa.hatchett@osktate.edu

Department of Biochemistry and Molecular Biology

Graduate Student Handbook

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Department of Biochemistry and Molecular Biology

Introduction

The Department of Biochemistry and Molecular Biology offers graduate level research-based programs of study, leading to a Master of Science (M.S.) degree and/or a Doctor of Philosophy (Ph.D.) degree. Graduate work is more than a continuation and extension of undergraduate work. It is an inquiry into the current status of scientific knowledge and also into the basis for this knowledge and the methodology involved in its acquisition. Continued enrollment in a course of study leading to an advanced degree is contingent upon the student making satisfactory progress toward the degree. In general, this will entail the maintenance of at least a B average in formal course work and satisfactory research credits. Successful graduate work must be motivated by scientific curiosity. This will lead to exploration beyond regular assignments and ultimately result in some contribution to the solution of still unsolved problems of importance to mankind. Graduate students are valued members of the Department, as they are relied upon heavily to help carry out the research mission of the faculty

This Handbook is intended as a guide for most of the rules governing the graduate programs in the Department of Biochemistry and Molecular Biology. It also provides guidelines for handling discretionary aspects of the graduate programs. Graduate students and faculty should familiarize themselves with its content, paying particular attention to Departmental and University time points and deadlines.

Important Web Pages

Biochemistry and Molecular Biology

OSU Graduate School

OSU Vice President for Research and Technology Transfer

Division of Agricultural Sciences & Natural Resources

College of Agricultural Sciences & Natural Resources

<http://biochemistry.okstate.edu>

<http://gradcollege.okstate.edu>

<https://research.okstate.edu>

<http://dasnr.okstate.edu>

<http://casnr.okstate.edu>



Biochemistry and Molecular Biology Graduate Student Association

BMBGSA Mission

To provide an outstanding setting for the BMBGSA members to build a prolific career in the field of biochemical sciences.

To establish a mechanism for the graduate students to network with academic and industrial professionals that will broaden students' understanding in diverse areas of biochemical sciences.

To provide an opportunity for discussion of issues of concern for graduate students and offer leadership to direct action, when appropriate and necessary, to provide a collective voice for discussion of the graduate students' rights and responsibilities.

Graduate Student Research Symposium

The Graduate Student Research Symposium is an annual event hosted by the Biochemistry and Molecular Biology Graduate Student Association. The Symposium has the specific goal of giving OSU graduate students in diverse areas of the biological and physical sciences a chance to present their scholarly work.

- Presentations are evaluated by a panel of judges from the University.
- Awards are presented to the top four presenters in the oral and poster sessions.
- Participating in the Research Symposium allows students to learn about what other students are doing and get ideas for future projects.
- Prizewinners have an excellent item to add to their c.v.

Check with your BMBGSA Officers to find out how participants are chosen in your area.

General Meeting Information

BMB Graduate Student Association general meetings are scheduled as the officers see fit. An email is sent out in advance to notify everyone. Membership dues are collected on a yearly basis.

Incoming Graduate Student Mentoring Program

Incoming graduate students will be assigned to a volunteer graduate student mentor for the first year of the graduate program. The graduate student mentor will provide helpful insight into the life of a graduate student.

BMB Graduate Students Association Web Page

On this website you will find the officers' information for the BMB Graduate Student Association and a member list. Please notify the current web monitor for additions to the web page.

<http://biochemistry.okstate.edu/programs/graduate-program/bmbgsa>

Graduate Programs

The Department of Biochemistry and Molecular Biology's graduate program is focused on a curriculum leading to a M.S. or Ph.D. degree, to prepare students for the many career opportunities in this field that require advanced course work. This graduate program is also an integral part of the extensive basic research activities supported by the Oklahoma Agricultural Experiment Station. Upon joining the department, new graduate students should be aware that deficiencies in their undergraduate education might need to be addressed, that graduate credits earned at OSU or other accredited institutions may be eligible for transfer, and that there may be opportunities for students to adapt their program to their specialized needs.

Prerequisite Remediation

For students to succeed in our program, it is suggested that individuals have 2 semesters of organic chemistry, 1 semester each of calculus and physical chemistry, and a year of college physics. One semester each of analytical chemistry and physical (biophysical) chemistry (or their equivalents), and two semesters each of general chemistry, organic chemistry and biochemistry are highly recommended. If a thesis adviser notes a deficiency in the undergraduate education of an advisee, the individual may be required to take appropriate undergraduate courses to make up deficiencies. The course(s) are not covered by their tuition waiver agreement. An average grade of at least 3.0 (4.0 = A) in all undergraduate courses is required for which no graduate credit will be given.

Transfer of Graduate Credits

Transfer of graduate credits to the Graduate College is possible only when the student was formally admitted to the graduate college at another accredited institution and the course(s) was certified as graduate credit by that institution.

The transferred credits must be recommended by the advisory committee as part of an approved Plan of Study. The acceptance of transferred credits requires the recommendation of the student's advisory committee and approval by the dean of the Graduate College at the time a Plan of Study is submitted. A maximum of nine (9) credit hours with a grade of "B" or better in each course can be accepted as transfer credits toward a master's degree. Doctoral students must complete at least 30 credit hours of their program at OSU. However, no more than nine (9) credit hours can be transferred from institutions that do not grant doctoral degrees.

Opportunities for students to adapt their program.

Students should plan their program with the advice of their Advisor and Advisory Committee.

An accelerated Ph.D. program requires additional credits in the summer of the first year and following semesters. Selection of this program must be made in time to obtain Department and Graduate School Approval of this option. Students already holding a M.S. degree will take class-work required to complement their background and meet the needs of their doctoral research. Those students should immediately identify an advisor, establish a Plan of Study, and determine the best manner in which to complete the curriculum and research requirements for their program.

Note: Enrollment in more than 12 hours a semester requires an Excessive Hours petition which needs to be approved by the advisor and the dean of the Graduate College.

Policy on the minimum grade

Grade requirements (Section 11.7 in the Catalog)

To receive a graduate degree, a student must have a minimum 3.00 GPA in the coursework taken for graduate credit. Incoming students in the Fall 2019 and thereafter will be expected to maintain an overall 3.0 GPA in all graduate coursework, not just for their Plan of Study.

The Master of Science Degree

The Department of Biochemistry and Molecular Biology offers two options for obtaining a Master of Science (MS) degree: a MS with thesis; and a non-thesis M.S. degree. In addition, we award our Ph.D. students a non-thesis MS degree after they pass their Ph.D. qualifying exam, should they desire to apply for the degree.

COURSE REQUIREMENTS

The course requirements are determined with the assistance and approval of the student's advisory committee. A formal "Plan of Study" must be approved by the advisory committee and submitted to the OSU Graduate College before completing 17 credit hours of graduate study.

M.S. (Non-Thesis)

For the Non-Thesis M.S. degree, the Graduate School Plan II (Report Option) is followed. This option requires 32 credit hours consisting of 30 credit hours of course work and 2 credit hours of research. To meet requirements in Biochemistry and Molecular Biology, non-Thesis students are required to complete BIOC 5002, 5112, 5753, 5853, 5930 (6 credit hours) and 5000 (2 credit hours). A grade of B or better must be obtained in each of these M.S. level courses. In addition, Non-Thesis M.S. students are required to pass with a B or better two advanced (BIOC 6000-level) Biochemistry and Molecular Biology courses. Students receiving a C or lower in an advanced level course will have the opportunity to take additional advanced BIOC courses to meet the requirement of passing two advanced courses with a B or better. Non-Thesis M.S. students must enroll in 2 credit hours of BIOC 5000 in their last semester. Students are expected to enroll once in BIOC 6110.

M.S. (Thesis)

For the Thesis-M.S. degree, the Graduate School Plan I (with thesis) is followed. The thesis M.S. degree requires a total of 30 credit hours with 24 credit hours of course work and 6 credit hours of research. BIOC 5002, BIOC 5112, BIOC 5121, BIOC 5753, BIOC 5853, and BIOC 5930 (2 credit hours) must be included in that total and a B or better is required in each of these 5000-level courses. One hour of BIOC 5121 is required each year that students working on a Masters by thesis are in our program. This will entail that they give a research presentation on their own research at the yearly departmental graduate student research colloquium. Thesis M.S. students also are required to complete 6 credit hours of research (BIOC 5000) in which they are given a satisfactory grade (SR). Thesis M.S. students are required to pass two advanced (BIOC 6000-level Biochemistry and Molecular Biology courses with a B or better. Students receiving a C or lower in an advanced level course will have the opportunity to take additional advanced BIOC courses to meet the requirement of passing two advanced courses with a B or better. Students are expected to enroll once in BIOC 6110.

REQUIRED EXAMINATIONS

M.S. (Non-Thesis)

Students electing this program will do a series of three laboratory rotations (2 credit hours each semester, BIOC 5930). Entering students may be required to take BIOC 5824 their first semester to acquire the laboratory skills in basic techniques of biochemistry and molecular biology needed to complete their rotations successfully. In the final semester, they will write a report presenting the theoretical and experimental aspects of the techniques developed in those rotations and present an oral report to the faculty in Biochemistry and Molecular Biology in an open seminar (BIOC 6110). Students are expected to register for Research (BIOC 5000 for 2 credit hours) for this research-writing project. The student's Graduate Committee must approve the written and oral reports and an oral exam must be passed.

M.S. (Thesis)

Students entering the M.S. Thesis Program must identify a faculty advisor and complete research for a thesis. They must present a final oral defense of their completed Master's research thesis before the advisory committee. The seminar (BIOC 6110) portion of the oral defense will be open to the public and must be announced at least two weeks in advance of the scheduled seminar. Supervisory or examining committee report forms must be filed at the conclusion of the defense with the Biochemistry and Molecular Biology Department.

The Doctor of Philosophy Degree

The PhD program course requirements are determined with the assistance and approval of the student's advisory committee and are based on whether a BS or MS has previously been earned: (a) a minimum total of sixty (60) graduate credits are required if a student enters the PhD program having earned a MS in a related discipline; (b) a minimum total of ninety (90) graduate credits are required if a student enters the PhD program having earned not higher than a BS in a related discipline.

COURSE REQUIREMENTS

The course requirements are determined with the assistance and approval of the student's advisory committee. A formal "Plan of Study," with a minimum of 30 credit hours of graduate coursework, a minimum of 15 credit hours of Research, and a minimum total of (a) 60, if entering the Ph.D. Program with an MS degree or (b) 90 credit hours must be approved by the student's advisory committee and submitted to the OSU Graduate College before completing (a) 17 or (b) 28 credit hours of graduate study. The student's advisory committee is selected at the end of the second semester. All graduate students must maintain a B average in their graduate coursework. A grade of C in a single graduate course can place the student on academic probation. The Department offers research experience in a variety of areas. Formal PhD program graduate coursework includes all of the courses listed for the MS degree, at least four of the advanced graduate courses in biochemistry (6000 level) including BIOC 6740, and additional courses and lab experience appropriate to the student's interests.

Course selection guidelines:

- **Required graduate courses:** BIOC 5002, BIOC 5112, BIOC 5753, BIOC 5853, BIOC 5930, and BIOC 6740. A grade of B or better is required in each of these 5000-6000 level courses. The advisory committee can approve previous coursework or experience as meeting these requirements. One hour of BIOC 5121 is required each year that students working on a Ph.D. are in our program, this will entail that they give a research presentation on their own research at the yearly departmental graduate student research colloquium.
- **Four advanced graduate courses** (6000-level) in Biochemistry and Molecular Biology. For the combined advanced courses, a B average must be maintained.
- **Enroll twice in BIOC 6110:** once when presenting and defending their thesis proposal for their Ph.D. qualifying exam, and once when presenting and defending their Ph.D. thesis.
- Graduate courses in other fields of specialization can be taken as appropriate to the student's dissertation research and interests.

REQUIRED EXAMINATIONS

Students are expected to meet examination deadlines in a timely fashion. Failure to meet examination deadlines will result in a meeting with the Department Head, the student's dissertation advisor, and the Graduate Coordinator to decide whether disciplinary action is required. If the student feels that recommended course of action is unfair, they may appeal the action through the Graduate Student Ombudsman to the Graduate Program Committee.

Ph.D. Preliminary Examination

During a student's first progress report meeting held before the beginning of the summer semester, the student will discuss with their advisory committee the topic area of their proposed Ph.D. research. During the first two weeks of the fall semester, the student will solicit references to reading materials, topics and/or general questions to study/research upon which the committee plans to base their preliminary exam's questions. Prior to final exam week of their second fall semester, the student will arrange a schedule for receiving the series of questions from their thesis advisor and committee members that will be given to the student to answer after the end of finals week. The deadline for completing these exams is the beginning of the holiday break. Each member of the committee may require the questions be answered as a written exam, which can be open book based upon the committee member's decision, or a take home exam. Alternatively, at their discretion, a committee member may relay to the student that they chose to ask questions based on previously suggested reading material with no written response requested prior to the exam. The written exams required by committee members should be completed before the beginning of the holiday break, and the results returned to the student, at the latest, by the first day of registration week of the spring semester to allow the student to remediate any areas of deficiency they perceive after completing the exams. **The deadline of the oral preliminary exam is the end of registration week prior to their second spring semester.** The exam will be based on the list of the prior exam questions given to the student, but can also reflect material from their classwork work-to-date or from their research. Should the student fail the exam, the student's advisory committee will make a recommendation on whether the student should be given a second chance to take the exam. Reasons for denial of a second exam should be given in writing to the Graduate Program Committee via the Graduate Coordinator. If the student disagrees with their advisory committee's recommendation they can appeal the decision through

the Graduate Student Ombudsman to the Graduate Program Committee. The make-up exam is expected to be completed by the end of Spring Break during the students second spring semester.

Ph.D. Candidacy Examination

Doctoral students will discuss the intent and timeline for their written proposal in the area of their dissertation to their advisory committee by **June 30th** in their second year after entering the graduate program. The advisory committee will approve the topic, or suggest modifications, if necessary. This discussion will occur at the graduate's advisory committee meeting that is required to occur before the beginning of the summer semester, and for the submission of their annual progress report, and will be duly noted on the report. The student will then prepare a written proposal that closely follows guidelines from a federal granting agency (NIH, NSF, or USDA guidelines will be acceptable), subject to formal approval by the student's committee. The intent of the written proposal is to identify an important unanswered question within the dissertation topic area, and write a proposal that addresses this question using relevant experimental approaches. The length of the proposal should be approximately 20 pages, with text double-spaced and written in 12 pt. Times font with one-inch margins. Figures and references are excluded from the page limit guidelines. Preliminary data is not required for the proposal, and cannot be used as an excuse to not complete the proposal within the timeline set for the defense. By the end of the second week of the fall semester, a date will be set for the proposal defense, and the written proposal will be submitted to the graduate student's advisory committee **at least one week prior to the defense date.** It is the student's responsibility to ensure that the proposal is written in an understandable manner and with proper English grammar. OSU staffs a Writing Center to help students improve their writing skills. The committee will evaluate the quality of the written proposal and determine if the student can progress to the oral presentation portion of the candidacy examination

Oral Presentation

In the fall semester of their third year, during which student plans to defend their Ph.D. Candidacy proposal, the student should enroll in one credit hour of BIOC 6110 (seminar). The student will present the proposal to members of the advisory committee in an open departmental seminar on the date set by their timeline and committee meeting early in the fall semester. An oral examination will be held immediately following the oral presentation and a decision of pass or fail will be determined by consensus of the examination committee. In addition to the material in the oral and written presentations, all other areas of Biochemistry and Molecular Biology are open for discussion and inquiry by the committee members. Should the student fail the exam, the student's advisory committee will make a recommendation whether the student should be given a second chance to take the exam. Reasons for denial of a second exam should be given in writing to the Graduate Program Committee via the Graduate Coordinator. If the student disagrees with their advisory committee's recommendation they can appeal the decision through the Graduate Student Ombudsman to the Graduate Program Committee. If the petition is approved, re-testing must be completed within one month. Students failing the second examination will be asked to complete the requirements for the M.S. Program.

Final Oral Defense of Dissertation

Upon completion of research activities, the candidate will prepare a written dissertation that will be evaluated by the student's advisory committee. Students are recommended to consult and involve their advisory committee at early steps during preparation of the dissertation. OSU now conducts a one-week thesis/dissertation writing workshop to aid graduate students in the preparation and writing of their thesis. The students are expected to give a final draft of their thesis to members of their advisory committee at least one week (or earlier if requested by any individual member) before the thesis defense is scheduled. The thesis should be clearly written with proper English grammar. If a student has any questions as to the quality of their writing, they should consult their thesis advisor or the OSU Writing center. Candidates will enroll in BIOC 6110 (seminar) and give a final public presentation of their dissertation research followed by an oral defense of the dissertation to their advisory committee. The advisory committee is the final arbitrator in the success of the dissertation and its defense.

Bioinformatics Graduate Certificate Program

The Department of Biochemistry and Molecular Biology also offers the Bioinformatics Graduate Certificate Program – a multi-disciplinary program that involves faculty in Departments across the University. This Program's mission is to train post-baccalaureate students in the techniques required to generate, analyze, and interpret complex biologically derived data sets. The Graduate Certificate in Bioinformatics requires completion of 16 credit hours of course work eligible for graduate credit. A minimum of 12 credit hours must be at the 5000 level or above. Required courses include 9 credit hours from the core areas of life sciences, statistics, and computer sciences. Additional information on this Certificate Program is available online: <http://www.bioinformatics.okstate.edu/>.

All Graduate Programs (M.S. & Ph.D.)

Advisement

During the first semester of graduate work, until a permanent advisor is selected, the Department Head or the Graduate Student Coordinator will serve as temporary advisor. In the first semester of graduate work, the student should choose a research advisor in consultation with the Department Head and the Graduate Student Coordinator, and with the consent of a research advisor.

By the end of the second semester in residence, students and their advisors will submit the student's plan-of-study and the members of their advisory committee for approval by the Graduate Dean. For non-Thesis M.S. students, the committee normally consists of a fixed committee of three faculty members in Biochemistry and Molecular Biology, assigned by the Department Head. For thesis M.S. students, the committee will consist of a minimum of three members of the Graduate Faculty, of which three must also be faculty in the Department of Biochemistry and Molecular Biology. For Ph.D. students, the committee will consist of a minimum of four members of the Graduate Faculty with at least three members from the Department of Biochemistry and Molecular Biology and at least one member from an appropriate outside department. The student will consult with his/her research advisor and the Department Head concerning the membership of this committee.

All graduate students are expected to develop a Plan-of-Study immediately after forming an Advisory Committee. **The Graduate College requires such a plan** before completing the 17th hour for M.S. students and the 28th hour for Ph.D. students. The Plan-of-Study must be approved by their Advisory Committee, the Graduate Advisor, the Graduate Coordinator and the Dean of the Graduate College. Every graduate student is required to meet with their advisory committee twice a year: once at the end of the fall semester (after finals week and before the holiday break); and after the completion of the spring semester (before June 30th) to complete their annual progress report and appraisal. Remediation measures for any deficiencies in a student's performance noted at the meetings should be suggested and documented, and progress made toward addressing said deficiencies should be discussed at the next committee meeting. Failure to make progress toward, or meet the remedial measures, can be used as grounds for dismissal of a student from the program, as described below.

Student Appraisal

The Graduate Program Coordinator will evaluate the performance of any students receiving a C in any course in their first year before the fall semester of the next year. The committee will consider academic performance, preliminary examination record and the evaluation of the student's research performance by the research advisor. After due consideration of these factors, the committee will recommend to the entire faculty whether each student is qualified to continue working toward a degree. The committee will set the standards for this recommendation. The research advisor may submit a separate recommendation to the faculty if she/he disagrees with the recommendation of the committee. The faculty will then decide whether to accept or reject each recommendation. Those judged unqualified will be asked to complete requirements for a M.S. Degree or leave the program.

Annual Graduate Student Progress Report

All graduate students in the Department of Biochemistry and Molecular Biology are required to complete the Annual Graduate Student Progress Report and submit the report to the Departmental office by June 30th of each year. The report will indicate if satisfactory progress is being made toward your degree. Satisfactory progress includes having two committee meetings a year, regular attendance at the Departmental seminar, and other Departmental events. Students who are making unsatisfactory progress toward their degree will initially meet with the Department Head and their advisor to develop a plan to obtain satisfactory progress. Students with continued unsatisfactory progress will be referred to the Graduate Program Committee for a student appraisal that can result in removal from the graduate program.

Responsible Conduct of Research, and Title VII and IX Training

All graduate students are required to complete "Responsible Conduct of Research Training" (RCR) in compliance with university policy by the end of their first semester of enrollment. For more details please go to:

<http://research.okstate.edu/compliance/rcr/training.html>. Failure to complete RCR training may result in termination of employment, as the training is federally mandated for any student being paid from federal funds.

All students are also required to complete Title VII and IX training during their first semester of employment. In addition, any student employed as a Graduate Research or Teaching Assistant must complete Title VII and IX Training annually. A copy of all documents certifying completion of training are required to be given to the departments administration assistant to be placed in the student's file.

Graduate Student Support and Tuition Waivers

M.S. degree applicants are not normally admitted with a guarantee of stipend support from the Department. However, stipend support with tuition waiver may be possible for some U.S. Residents through their affiliation with a research program as graduate research assistant, or their appointment to graduate student assistantship.

Stipend and tuition support for Ph.D. candidates are awarded from Department resources on a competitive basis at the time of admission to the program. Normally, initial support from general Departmental funds will be for one semester with responsibility for support passing to the research program in which the student does doctoral research. Stipend support will normally be continued for a total of five years with support for additional years being dependent upon availability of funds. Under all circumstances, continued graduate student support will be contingent on satisfactory academic and research performance, normal progression through the curriculum, timely completion of the Written and Oral Qualifying Exams and available funding. Students switching from the Ph.D. Program to the M.S. Program will not necessarily continue to receive Departmental support. To be eligible for tuition waivers and stipend support students are required to complete financial aid forms in the Graduate School yearly and to periodically update their visa status. It is the student's responsibility to follow through with these requirements. Failure to do so may result in partial or total loss of financial assistance. Additional support for students through the Department Head may be available each fall and spring semester in the form of employment as a Graduate Teaching Assistants (GTA) to assist in the department's undergraduate teaching program. Support will be received as a GTA stipend,

Petitioning to Have Requirements Waived

The requirements described in this handbook provide a comprehensive background for all students in areas important to the pursuit of a career in Biochemistry and Molecular Biology. While the described guidelines are to be fulfilled by all graduate students, the Department recognizes that specific cases may arise in which: Equivalent requirements (especially course requirements) have been fulfilled recently at a comparable University.

A student's program would benefit if specific aspects of the Biochemistry and Molecular Biology requirements were modified. If a student feels this to be the case, a formal written petition may be made to the Research Advisory Committee to request waiving or alteration of the Biochemistry and Molecular Biology requirements, and in all cases, sufficient documentation must accompany the request. Petitions should be made in a timely fashion prior to graduation (generally within the first year for M.S. students and the first two years for Ph.D. students). An amply documented petition to waive Departmental course requirements would include, but would not be limited to: grade received, institution and date the course was taken, a letter from the course instructor if possible, a copy of the course syllabus, a description of general areas covered, a listing of textbooks used in the course, and a letter of support from the student's Research Advisor. Other areas open to petitioning include substitutions in general course area requirements. In all cases, the student should clearly describe why the current requirement would not best fulfill their needs and what would be gained as a result of any changes.

Graduate Student Travel

The Department of Biochemistry and Molecular Biology Graduate Program encourages student attendance at scientific meetings/workshops. Generally, a student's Research Advisor is expected to provide support for students who are presenting papers/posters at a meeting. Alternatively, students should seek travel grants from an appropriate professional organization, the GPSGA, or the graduate college.

Graduate Student Vacation Policy

Each graduate student shall accrue 7 vacation days per year based on a 12-month 0.50 FTE assistantship. First year students accrue vacation **after being in the program one calendar year**. Students will only be allowed to accrue a total of 21 days' vacation time. Students must give at least three weeks' notice and come to a mutual agreement with their advisor prior to taking vacation. International students must discuss vacation plans prior to finalizing travel arrangements. Exceptions will be made for emergency travel. The 7 days do not include University Holidays. Students will not be compensated for any unused vacation days upon graduation or termination of employment.

Code of Conduct for Graduate Students

Graduate students must abide by all relevant standards and rules of the University. The Code of Conduct, and related processes, serves to educate students about their civic and social responsibilities as members of the University community. Therefore, the primary focus of the disciplinary process is on educational and corrective outcomes; however, sanctions, such as suspension or expulsion from the University, may be necessary to reinforce community standards and to protect the campus community. The most current version of the Code of Conduct is available electronically as a PDF file at <https://studentconduct.okstate.edu/code>. All graduate students employed as graduate teaching or research assistants are required to complete "Student Employee Title VII and Title IX Training" annually in compliance with university policy. For more details go to <https://hr.okstate.edu/TitleVIITitleIXTraining>. Students should recognize that all research carried out under a sponsoring faculty member legally belongs to the University. Failure to abide by University or Departmental guidelines can result in dismissal from the program. If a student is concerned about an ethical situation, they should consult

their Research Advisor, the Graduate Student Ombudsman, the Graduate Student Coordinator, or the Department Head, depending on the nature of the suspected misconduct.

Appeal Policy for Violations of OSU Student Code of Conduct:

All graduate students are expected to adhere to the OSU Student Code of Conduct (<https://studentconduct.okstate.edu/code>), and policies specified above for remaining in good standing in the Department of Biochemistry and molecular Biology

Graduate students charged with violations of the OSU Student Code of Conduct should read the Graduate Student Policy information (<https://studentconduct.okstate.edu/information>) and information on the appeals process (<https://studentconduct.okstate.edu/appeal>), and fill out the appeal form (https://cm.maxient.com/reportingform.php?OklahomaStateUniv&layout_id=10) should they wish to appeal.

Departmental Expectations for Graduate Student Conduct.

Students can be terminated from the Graduate Program by their Advisory Committee for the following reasons:

- 1) Failure to adhere to the OSU **Code of Conduct for Graduate Students**
- 2) Failure to meet minimum academic standards
- 3) Failure to make acceptable progress in their program work
- 4) Failure to demonstrate satisfactory research effort
- 5) Failure to meet generally acceptable ethical standards of the University
- 6) Failure on the preliminary or candidacy exams
- 7) Failure during the thesis/dissertation defense

It is the obligation of the student to ensure that they are complying with University and Departmental guidelines with respect to these aspects of their education. If students are unsure or concerned about their status within the Department, they should consult with their Research Advisor, the graduate Student Ombudsman, the Graduate Program Coordinator, or the Department Head depending on the nature of the dispute.

GRADUATE PROGRAM APPEALS PROCESS FOR CONFLICT RESOLUTION SPECIFIC TO THE DEPARTMENT OF BIOCHEMISTRY AND MOLECULAR BIOLOGY POLICIES.

Overview: The purpose of this procedure is to provide current graduate students in the Biochemistry and Molecular Biology Graduate Program the opportunity to resolve complaints about dismissal from the program, placement on probation, recommended denial of readmission to the program, and other administrative or academic decisions that terminate or impede a student's progress toward their academic or professional degree goals, as described above under "**Code of Conduct for Graduate Students**". Graduate students are encouraged to speak with the Graduate Student ombudsman prior to filing an appeal/complaint.

Process: The student is required to provide written notification of appeal to the graduate program coordinator within 14 calendar days of the precipitating event that is the subject of the appeal. If the Graduate Program Coordinator is an involved party, the student should seek advice from the Graduate Student Ombudsman, the unit head or associate dean of graduate studies in their disciplinary college. Notification should include, information on the circumstances of the appeal, specific issues involved, and the remediation action sought. The document should be no more than two pages. Within 7 calendar days of receipt of the notification, any involved parties within the program (e.g., faculty or staff) will be notified and provided a copy of the appeal. The graduate program's appeals committee will be convened to hear the appeal within a reasonable amount of time, usually 30 days (*see note below*). At the hearing, the student will have the opportunity to present their case and the same time would be allowed for counterarguments, if warranted. Questions may be asked of either party by members of the appeals committee. At the end of this hearing, the program's appeals committee will deliberate, and their decision will be considered final at the program level. The student will be notified in writing of the decision and their right to appeal to unit head, followed by the Dean of the Graduate College, if they so choose.

Enrollment: Throughout the appeal process the student is allowed to maintain enrollment and continue working toward the graduate degree in the same manner as any other matriculated graduate student in the program depending on the nature and severity of the infraction. Continued enrollment is not required to appeal within the allowed timeframes.

Appeals Committee: The graduate program's appeals committee will consist of at least 4 members of the established Graduate Program Committee for all student appeals (excluding any member of the committee who may be perceived to have a conflict-of-interest), and one addition adjunct faculty member of the department. If necessary, an ad-hoc

committee will be appointed by the Graduate Program Coordinator or unit head consisting of four members of the Graduate Faculty and one additional adjunct faculty member of the department (if available) or a faculty member outside of the department.

Deadlines: Unless stated otherwise, all deadlines are by 5:00 pm central time on the day of the deadline or the next regular business day (Monday–Friday) when the deadline falls on a weekend (Saturday–Sunday) or OSU official holiday, such as Labor Day. Time frames and deadlines that extend beyond the end of the academic terms (fall and spring semesters and summer sessions) are handled at the discretion of the Graduate Program Coordinator.

Leaving the Program

A student may request a temporary leave-of-absence of no more than two weeks from the Graduate Program by petitioning the Biochemistry and Molecular Biology Department Head. This should be done in writing and should contain appropriate explanations.

Longer leaves of absence (up to one year) are allowed through the Graduate College “Leave of Absence Policy” (see <http://gradcollege.okstate.edu/prospective-students/enrollment-guide.html>). A formal Leave of Absence policy form can be requested and filed with the Graduate College. This action keeps the student’s matriculation “active” and stops their “time to degree” clock, and does not require the student to enroll in classes or pay tuition and fees. Students should recognize that without formally requesting and receiving such a Leave-of-Absence approval from the Graduate College, they are officially terminated by the University any time they do not register for one semester, after which they must officially apply for re-admittance to the University.

Students may resign from the Graduate Program at any time. To do so, they should write a letter to the Graduate Program Coordinator and the Department Head stating their intent. It is advised that students contemplating such a move should first consult with their Research Advisor, the Graduate Program Coordinator, and the Department Head, before beginning such a process.

Students can be dismissed from a faculty member's research program at any time if the Research Advisor (in consultation with the student's Advisory Committee) determines that the student is not making acceptable progress. Such a dismissal, in itself, will not constitute dismissal from the Department, but it is the obligation of the student to find an acceptable replacement Research Advisor in the Department within one semester. Students will not be allowed to continue their education within the Department without a Research Advisor. If you find yourself in this situation, you should schedule a meeting with the Graduate Student Ombudsman and/or the Graduate Program Coordinator to determine the best course of action.

It is the obligation of the student to ensure that they are complying with University and Departmental guidelines with respect to these aspects of their education. If students are unsure or concerned about their status within the Department, they should consult with their Research Advisor, the Graduate Program Coordinator, or the Department Head.

What is O-Key?

O-Key is an information account management system that contains your information as a student or employee at OSU. By logging into O-Key, you can access information such as your username, password, email address, contact information, etc. From the O-Key system, you have the option of using the university-supported email system (Microsoft Outlook/Exchange) or forwarding your OSU email to another account of your choice. You can also edit contact information and add emergency contact information.

When do I use my O-Key login?

O-Key username and password are used to access the student computer labs, Student Information System (SIS), the Online Classroom and Community (D2L) and to access your OSU Outlook/Exchange email.

Activating my O-Key Account

To activate your O-Key account, follow the steps below:

1. Go to: <http://app.it.okstate.edu/okey/>
2. Click on the O-Key Account Activation button on the main page.
3. Enter the first 2 characters of your last name, the last 5 digits of your Social Security Number (or OSU Identification Number), and your date of birth in the appropriate fields. Once all three pieces of information have been entered successfully, you will be guided through an activation wizard that will help you obtain an O-Key username, password, and email address.
4. Upon completion of the activation wizard, it may take up to an hour before your new account is ready to us

Enrollment

Classes for new semesters are available on SIS one month before enrollment begins. You may begin planning your schedule as soon as the new semester classes are posted on Student Self-Service. Continuous registration is required to remaining in good standing with the graduate college. It is the student's responsibility to register for the number of credit hours a given semester to requirements of the Graduate College to remain in good standing. There is a way to request a reduction in the credit hours required for a given semester, but the paper work for such a request must be filled out, filed and approved by the Graduate college **BEFORE** the beginning of the semester.

New Graduate Students: Meet with the Graduate Coordinator

First-time graduate students have an "Advising Hold" that must be cleared before students may enroll. Contact the departmental Graduate Coordinator to arrange a meeting. During your meeting, the Graduate Coordinator will answer your questions and clear you to self-enroll on the appropriate day.

Continuing Students

Don't forget to discuss your intended schedule with your thesis advisor prior to registration.

Planning Your Schedule/Online Enrollment: see: <https://registrar.okstate.edu/XE-Registration>

1. Go to my.okstate.edu and login using O-Key ID and password
2. Under Application, click on the "Self-service" icon
3. Click on the "Student" tab, then "Registration"
4. Under registration, you have the options of "Prepare for Registration", "Plan Ahead", "View Registration Information", "Browse Classes" or "Browse Course Catalog". For each as needed, select term (e.g. Fall 2020) and then click "submit" and follow the directions given in the link above to find course numbers and sections.
5. To register, click "Register for Classes". Choose appropriate field (e.g. Biochemistry) and course number and click "search"
6. Click "View Sections" (if necessary) beside the class you for which you want to register. If a class is a variable credit class, click on the "Change Credit Hours in a Variable Credit Class" for directions on how to enter the number of credit hour for which you are registering (the default setting is one credit hour)
7. Check-mark the box on the left next to the section of the class you want to register for, and then at the bottom of the page, click "Submit". If you click "Submit" and registration is successful, a green "Save Successful" message will display in the upper right corner with no error messages, and the status will change to "Registered" in the Summary with a green background color.
8. For details on handling different registration error messages, click on the class title and view enforced prerequisites and other restrictions in the Class Details, or refer to our [Common Registration Issues](#) page.
9. Click "New Search" at the bottom of the page, and repeat steps 5-7 as necessary. Click "Exit" when you are finished.
9. If you encounter a registration hold contact the Graduate Coordinator to determine why there is a hold and how to

correct it.

10. If you encounter a permission hold, contact the instructor of record to release a hold due to prerequisites or for instructor permission to enroll.

How do I Change My Schedule?

Courses may be added or dropped via O-Key Student Self-Service at any time **before the sixth day** of fall or spring classes. The regular summer session drop-date is the third day of classes. Short course drop days are pro-rated; please contact the Registrar's Office for more information. After the last day to add or drop via Student Self-Service, you must obtain a signature from your advisor and deliver the signed request to Registration Services.

How Do I Add a Class?

Click on the link: <https://registrar.okstate.edu/XE-Registration>

1. Click on the "Register for Classes" tab.
2. Click on the "Add Classes" link.
3. Follow the directions, which are the same as those described above.
4. Verify your enrollment.
5. Print your schedule, if desired.

How Do I Drop a Class?

Courses may be dropped via O-Key Student Self-Service at any time **before the sixth** day of fall or spring classes. The regular summer session drop date is **the third day** of classes. Short course drop days are pro-rated; please contact the Registrar's Office for more information. After the drop deadline, you must obtain a signature from your advisor and deliver the drop request to the Registration Services.

Click on the link: <https://registrar.okstate.edu/XE-Registration>

1. Click on the "Register for Classes" tab.
2. Click on the "Drop Classes" link.
3. Follow the directions.
4. Verify that your enrollment for the class has been cancelled (Save Successful message appears)
5. Print your schedule, if desired.

Print Your Schedule

1. Click on the link: <https://registrar.okstate.edu/XE-Registration2>. Click "Detailed Schedule" from the pull-down menu.
2. Click "View Registration Information".
3. At this link the students can view their class schedule in various formats, and print or email their schedule.

Enrolling in Zero-Ending (Variable Credit) Courses

Courses that may be taken for variable credit are designated with numbers that end in zero (for example BIOC 6000). If you enroll in a zero-ending course, you are automatically enrolled for one credit hour. If you want to earn credit for more than one hour, you must choose the credit hours you desire, as described above.

List of Holds That Prevent a Student from Completing Enrollment

1. A past-due account with the Bursar's Office or a Collection's Hold.
2. Academic suspension (contact your Dean's Office).
3. Advising Hold (contact your advisor).
4. Admission's Hold.
5. International Student Office Orientation Hold.
6. Loan Exit Interview Hold or Student Loan Accounting Hold.
7. English proficiency exam (TEP2) Hold.
8. Prerequisite Hold (Contact course instructor).

Tuition Waivers

[OSU Graduate Student Tuition Waiver Benefit Information \(https://gradcollege.okstate.edu/prospective-students/assistantships.html\)](https://gradcollege.okstate.edu/prospective-students/assistantships.html)

Graduate students who are admitted and enrolled in any OSU master's, specialist or doctoral degree-granting program may be awarded a qualifying Graduate Research/Teaching Assistantship (GRA/GTA) that may have resident and/or nonresident tuition waiver benefits associated with the appointment. Students solely in graduate

certificate programs and non-degree seeking students are not eligible for GTA or GRA positions or associated tuition waiver benefits. The following information includes guidelines regarding tuition waiver eligibility.

Employment Eligibility

- Graduate tuition waivers only apply to 0.50 FTE (total) GTA/GRA positions. Graduate students with less than a combined total 0.50 FTE GTA/GRA positions do not qualify for tuition waiver benefits. Two 0.25 FTE positions may be stacked to reach the 0.50 FTE requirement. Note: Tuition and fees are separate; students will be responsible for all fees associated with their enrollment.
- GTA/GRA appointments are a maximum of 0.50 FTE during the spring and fall semesters. During the summer, GTA/GRA appointments are allowable up to 0.75 FTE.
- GTA's employed 0.25% FTE (10 hours per week) semester are required to take a minimum of nine credit hours in the fall and spring semesters and two credit hours in the summer. They are not eligible for the student health or tuition waivers.

* The maximum permissible FTE as a GTA/GRA during "Summer Session 1" ("Maymester") or Intersessions is 0.50 FTE with enrollment.

- Hourly and assistantship positions cannot run concurrently due to Federal regulations. Students either have to be an hourly (student worker) or assistantship position.
- Tuition waivers are based on the length of qualifying appointment as defined by the academic calendar terms and sessions (e.g., the definition of a fall or spring semester is 17 weeks).

Enrollment Eligibility

- Tuition waivers are limited to the number of hours in the degree program.
- Courses eligible for tuition waivers are defined as those graduate courses required for the student's degree program (i.e., Plan of Study, POS, or proposed POS).
- With a 50% GRA/GTA the student must be enrolled in a minimum of six (6) graduate credit hours in fall and spring semesters and 2 credit hours in summer sessions (please see Enrollment Exceptions and Summer Enrollment below for important FICA tax information that impacts summer paychecks). If a graduate student is not enrolled for the minimum number of hours, they cannot be employed as a GTA/GRA, the hourly "student worker" title should be used in these circumstances.

Enrollment Exceptions

Doctoral Candidacy Enrollment Requirements. A student who has completed the requirements for admission to doctoral candidacy and had their "Admission to Doctoral Candidacy" form accepted by the Graduate College, may enroll for a minimum of two (2) credit hours and be considered full-time. Post-candidacy reduced, continuous enrollment requirement applies to GTAs/GRAs; domestic and international students; and veterans receiving VA benefits. A student is normally expected to enroll primarily in research hours or in program-approved courses after being admitted to doctoral candidacy.

* An enrollment minimum of at least two (2) credits per semester is required for every semester of a student's candidacy (summer excluded if no work towards degree completion occurs) until graduation. It is ultimately the responsibility of each student to ensure that they meet this enrollment requirement.

Summer Enrollment

Graduate students who held a tuition waiver-benefit-eligible qualifying appointment in the immediate preceding spring semester, who completed their entire assignment(s) satisfactorily, and who are enrolled in at least two credit hours of eligible course during the summer terms immediately following the qualifying spring appointment, may receive a tuition waiver for those eligible credit hours irrespective of whether they are employed as a GTA/GRA during the summer term(s).

* If a student is employed in a summer session, s/he must be employed when they are enrolled. For example, if a student is only employed the June term, the student must be enrolled in at least the June session. If a student is employed in just July, the student may be enrolled in the eight-week session (June through July) or just the July session.

* Summer enrollment-employment restrictions are due to Federal tax regulation (FICA tax exemption for students: Section 3121(b) (10) of the Internal Revenue Code).

Course Eligibility

- Tuition waivers are limited to the number of hours in the degree program as approved by the Oklahoma State Regents for Higher Education (OSRHE). The graduate program may approve an additional 10% overage (e.g., an additional 3-hour course on a 30-hour degree). Anything over 10% of the required degree hours requires approval of the graduate dean.
- Courses eligible for tuition waiver are defined as graduate courses required for the student's degree program.
 - Courses that do not qualify for tuition waiver benefits are:
 - Undergraduate
 - Outreach Exception
 - Extension
 - Certificate
 - Repeated graduate courses (not designed to be repeated)
- The Dean of the Graduate College makes the final determination on course eligibility.

Course Exceptions

ENGL0003 and ENGL 4893 are covered by the graduate student tuition waiver program.

Academic Standing

- Once enrolled, good academic standing (i.e., not on academic probation, beyond probationary admission) is a requirement for OSU tuition waiver eligibility.

* In brief, good academic standing is a grade-point average (GPA) of "B" (3.00) and not on academic probation, which can result from unsatisfactory ("UR") research grades.

* Academic Probation. Once matriculated, a graduate student placed on probation is not eligible for tuition waiver benefits. This does not preclude a GTA/GRA appointment. Graduate programs can request a one-time exception from the Dean of the Graduate College for students on probation with exceptional circumstances.

Workload

- The expected workload for a 0.25 FTE position is 10 hours per week on average and 20 hours a week on average for a 0.50 FTE appointment.

Termination

- Tuition waivers are prorated based on the business days of employment in the term when a student does not complete the assignment/term/session (e.g., withdraws for the semester).

* Receiving an "incomplete" grade does not cause the proration or removal of a tuition waiver.

Note: Tuition and fees are separate; you will be responsible for all fees associated with your enrollment.

GTA's employed 0.25% FTE (10 hours per week) semester are required to take a minimum of nine credit hours in the fall and spring semesters and two credit hours in the summer. They are not eligible for the student health or tuition waivers.

Summary of OSU Graduate Degree Requirements

Enrollment Requirements

A more detailed description of the Graduate Program in Biochemistry and Molecular Biology is available on the Department's website: <http://biochemistry.okstate.edu/programs/graduate-program/>. The requirements listed below complement the general graduate requirements described in the "Graduate College" section of the Catalog. All Biochemistry and Molecular Biology graduate students are expected to attend and participate in the Department's Graduate Student Association Journal Club and the Department's Seminar Series throughout the academic year.

- Graduate students must complete a minimum of 6 hours during each 12-month period to be continuously enrolled. Failure to maintain continuous enrollment requires reapplication and admission to the program.
- Graduate students must be enrolled in at least two hours during any semester in which they are utilizing university resources including the semester in which they graduate.
- Graduate Research Assistants (GRA's) must meet minimum enrollment requirements:

0.50 or greater FTE	6 hours in fall or spring; 2 hours in summer
Less than 0.50 FTE	9 hours in fall or spring; 2 hours in summer
- All students (including those enrolling in research hours only) must be enrolled by the deadlines listed in the Schedule of Classes. Students cannot add courses after first 2 weeks of semester. (This includes research credits).

Time Limits

- All requirements must be completed within the following periods calculated from initial enrollment in the program:
Master's Degree: Degree completion within 5-6 years of first enrollment.
Doctoral students: Degree completion within 7-9 years of first enrollment
- All courses must have been taken and completed within 10 years of degree completion. No course on the Plan of Study may be more than 10 years old at the time of graduation.
- All requirements for the doctorate must be completed within 4 years from the passing of the Qualifying Exam.
- Students must follow deadlines for submission of thesis/dissertations and for completing final exams as listed in the catalog.

Grade Point Requirements

- Students whose cumulative graduate GPA fall below 3.0 are subject to being placed on Strict Academic Probation (SAP).
- Students on SAP may be dismissed from the program if they receive any grade below a B.

Transfer Hours and Residency Requirements

- Master's students may transfer a maximum of 9 hours from another university or from special student status at OSU.
- Doctoral students must take at least 30 hours at OSU. No more than 9 credit hours can be transferred if doctoral candidate received masters from an institution that does not grant doctoral degrees.

Responsible Conduct of Research Training

- All graduate students are required to complete "Responsible Conduct of Research Training" in compliance with the university policy. For more details please go to: <http://research.okstate.edu/compliance/rcr/rtraining.html>

Student Employee Title VII and Title IX Training

- All graduate students employed as graduate teaching or research assistants are required to complete "Student Employee Title VII and Title IX Training" in compliance with university policy. For more details go to: <https://hr.okstate.edu/TitleVIITitleIXTraining>

Plan-of-Study (POS)

- **The plan-of-study for a Master's candidate must be filed no later than the semester when the 17th hour is completed. Doctoral candidates should file the plan-of-study by the 28th credit hour or as early in their program as is feasible.**
- All students must indicate on their plans-of-study whether or not their research will involve human subjects. **If human subjects are to be used, approval must be received from the IRB *prior* to the beginning of the research.**

INSTRUCTIONS FOR COMPLETING THE MASTERS and PhD PLAN-OF-STUDY (POS) FORM

Supported Browsers for Canvas

Canvas supports the current and first previous major releases of the following browsers:

- **Chrome** 73 and 74
- **Firefox** 65 and 66 (Extended Releases are not supported)
- **Internet Explorer** 11 (*Windows only*—functionally supported; may exhibit slight visual differences from other browsers, but these differences do not restrict product functionality)
- **Edge** 42 and 44 (*Windows only*)
- **Respondus Lockdown Browser** (supporting the latest system requirements)
- **Safari** 11 and 12 (*Macintosh only*)

General information about submitting a Plan-of-Study is available under the resources link on the Graduate college web page: <https://gradcollege.okstate.edu/resources/current-student-resources.html>

1. Click on “Round Up”.
2. Fill out the personal information form on the first page, which should know whether you are accepted into the MS or PhD program.
3. Choose 32 hours for the non-Thesis M.S. degree, or 30 hours for the M.S. degree with thesis. Check whether you intend to complete a thesis, or formal report (non-thesis M.S.) as the culminating project for your master’s degree (you may change your mind prior to completing your studies).
4. Choose 90 hours if entering the Ph.D. Program with a Bachelor’s degree, or 60 hours if entering the Ph.D. program with a M.S. degree.
5. Verify that all the student information as requested is correct, including whether you are seeking a Master of Science or Ph.D. degree. Indicate the semester and year you anticipate graduating (this will be an approximation, as this can change).
6. Please be sure that you *accurately* identify the name of your major area of study and the department in which you are studying. Accurately identify any option and/or specialization you are seeking.
7. Check the appropriate box to signify if this is the original (first time submission) POS you are submitting for this degree or if this is a revised POS (you had a POS approved earlier and are making changes to your Plan).
8. Click continue.
9. Follow the direction for completing the form. A Plan of study form FAQ is available at: <https://gradcollege.okstate.edu/resources/plan-of-study-form-faq.html> .
10. Type the names of all committee members, with the name of your Committee Chair, in the appropriate boxes.
11. Please go to <http://compliance.okstate.edu> to determine if your research requires approval from the Office for University Research Compliance. Checking the box on the POS you confirm that you will follow all compliance procedures that are appropriate for your study.
12. Click submit when the form is complete. Your committee members will be notified automatically by email that they need to approve your POS. After the committee approves your POS, the graduate coordinator will automatically be notified that your POS needs approval. After the committee and graduate coordinator approve the POS, the Graduate College will review the plan for approval.
13. Print the forms. Retain one copy for yourself and give one copy to the office staff for your file. You may wish to print a copy to be reviewed by your advisory committee at your first annual appraisal, prior to submitting the POS online to the Graduate College.

Note:

1. List courses in chronological order. List the course prefix (3 to 4 letters) and course number (4 digits) in the first column and the course title in the second column. [**Note:** all 3000 and 4000-level courses included on the POS must be offered for graduate credit—an asterisk (*) must appear next to the course number in the OSU catalog appropriate to the time the course is taken.] If a course is taken at an institution other than OSU, in the third column name the institution where the course was/will be taken (see OSU Catalog for requirements for transfer courses). Give the semester and year the course was/will be taken in the fourth column. Finally, indicate the number of credit hours to be received for each course in the fifth column. The form automatically calculates the total number of credits for the degree.
2. For a thesis MS, do not enter more than 24 Credit hours of course work, and 6 credit hours of research (BIOC 5000). For a non-thesis MS (report option) do not enter more than 30 credit hours of course work and 2 credit

hours of research (BIOC 5000). If you enter any more than these required credit hours for your POS, the POS will be rejected.

3. For a Ph.D. degree you are required to enter a minimum of 30 Credit hours of course work, and a minimum of 15 credit hours of research (BIOC 6000), and a total of 90 credit hours. For Ph.D. candidates that have previously obtained an MS degree in Biochemistry and Molecular Biology, or a related field, you are required to enter 60 credit hours of course work and research (BIOC 6000), the mixture of which is determined in consultation with your thesis advisor and advisory committee. If the M.S. degree was received from an institute other than OSU, you are required to take 15 hours of course work. The form automatically calculates the total number of credits for the degree. Do not exceed the total of 90 or 60 hours on the Plan of Study or it will be rejected.
-

INSTRUCTIONS FOR MAKING REVISIONS TO THE ORIGINAL PLAN OF STUDY

1. Go to the POS Site as described above.
2. Logon with your O-Key credentials.
3. Click on the appropriate links to edit (change) your POS, or to change members of your advisory committee. Indicate that it is a revised the Plan of Study, note the date of change and submit. Print out copies for yourself and the office staff as indicated above. In some cases, when changing committee members, you will need a printed copy to be initialed by your committee members and the graduate coordinator, which is then submitted to the Graduate College. **Always make a copy of the initialed POS for yourself and the office staff, as paper work is known to get lost.**
4. Usually a revised POS is submitted only once to the Graduate College for approval at the beginning of the intended semester of graduation. This is a Graduate College requirement and the “Final Revised Plan” box at the top of the POS should be checked.

Graduation

- Within the first two weeks of the semester in which they are expecting to graduate, students must file a graduation clearance form with the Graduate College and an Application for Graduation with the Registrar. If they fail to graduate during that semester, they must re-file the Application for Graduation with the Registrar's Office.
- At the beginning of the semester of anticipated graduation, students are required to update their plans-of-study to ensure consistency with actual course work.
- Deadlines for submission of theses and dissertations are posted on the graduate College web site, and are strictly enforced.
- An electronic (pdf) copy of the thesis must be given to both the Department and the advisor.
- Attend Thesis/Dissertation Format Review Workshop or Complete the online Webinar. Workshop schedule posted to Graduate College website <http://gradcollege.okstate.edu/>
 - Thesis/Dissertation Guidelines: <http://gradcollege.okstate.edu/tdg>
- Submit to the Graduate College the “Thesis/Dissertation Oral Defense Results” form
 - http://gradcollege.okstate.edu/sites/default/files/Thesis_and_Dissertation_Defense_Results.pdf
- Complete online submission of thesis/dissertation and submit paper copy of signature approval page to the Graduate College at 202 Whitehurst
- Complete Coursework
- Complete corrections of online submission of thesis/dissertation document (one to two weeks after submission).
- All graduate policies related to graduate college degree programs can be found in the OSU Catalog.

Summary of Graduation Requirements

- Completion of an approved program of study with a minimum 3.0 GPA
- Successful oral defense and completion of thesis
- Completion of any writing and seminar requirements
- Clearing all incomplete grades remaining on your plan-of-study (usually BIOC 6110, seminar).
- Filing form with the graduate college that you have successfully defended your thesis (Ph.D. and MS), or that you have successfully turned in and defended your written report (non-thesis MS).

In general, the information in this handbook and the accompanying forms are the student's responsibility during his/her term in the program. Please refer to the *OSU Graduate Catalog* for official information.

<http://registrar.okstate.edu/University-Catalog>

The Graduate College has online the following links and forms to guide students through graduation:

<http://gradcollege.okstate.edu/resources/current-student-resources.html>

For Graduation

- Admission to Doctoral Candidacy
- Committee Change Request
- Graduate Application
- Formal Report Approval Form
- Graduate Clearance Form
- Graduation Checklist for Master's Level Students
- Graduation Checklist for Doctoral Level Students
- Guide to Graduation for Thesis and Dissertation Graduate Students (New Information!)
- Guide to Graduation for Non Thesis Master's Degree Candidates (video)
- Top 6 Reasons Students Fail to Graduate
- Thesis/Dissertation Manual
- Thesis/Dissertation Embargo
- Thesis/Dissertation-Oral Defense Form
- Thesis Signature/Approval Page Template
- Dissertation Signature/Approval Page Template

BIOC 4723 Introduction to Bioinformatics

Prerequisite(s): BIOL 1114 and MATH 1513. Providing an introduction to programming for those intending to work with large biological datasets. This course covers the basics of Shell programming, scripting languages and examples of using software and packages.

BIOC 5000 Research

1-6 credit hours max 6 credit hours. For M.S. thesis.

BIOC 5002 Research Compliance and Biochemistry Graduate Colloquium

Prerequisite(s): Graduate standing. Introduction to graduate research in the Department of Biochemistry and Molecular Biology. Policies for laboratory safety, research compliance, and ethical conduct of scientific research are presented.

BIOC 5102 Molecular Genetics

Prerequisite(s): BIOC 3653 or MICR 3033 and one course in genetics or consent of instructor. To understand, at the molecular level, the organization of genetic material and its functioning in the phenotypic expression of genetic characters. To understand the observational bases for interpretations and theories in molecular genetics. To become competent in the interpretation of research observations in molecular genetics and to develop facility in the design of research approaches to molecular genetic questions.

BIOC 5112 Articulation of Research Logic

Prerequisite(s): BIOC5753 or equivalent or permission of instructor. Techniques for effective communication of scientific reasoning, logic and critical thinking. Explanation of rationale, hypotheses, and experimental design. Public presentations as logical arguments. This course focuses on biomolecular systems.

BIOC 5121 Biochemistry and Molecular Biology Graduate Colloquium

Prerequisite(s): Graduate standing in the Department of Biochemistry and Molecular Biology. Annual colloquium during which all current graduate students are required to present their research progress for the academic year.

BIOC 5553 Agricultural Biochemistry

This course provides fundamental biochemistry knowledge for non-BMB *graduate students* of agriculture to understand how organisms function at the biochemical level, and how this relates to the more complex biological systems of plants and animals.

BIOC 5753 Biochemical Principles

Prerequisite(s): CHEM 3153 or equivalent. Chemistry of cellular constituents; introduction to the chemical processes in living systems. The first in a series of courses for graduate students in biochemistry and related fields.

BIOC 5824 Biochemical Laboratory Methods Lab

Prerequisite(s): BIOC 4113 or BIOC 5753. Lecture and laboratory course in basic biochemistry and molecular biology methods for separation and analysis of biological materials, including chromatography, electrophoresis, and centrifugation, use of radioisotopes, molecular cloning and DNA sequencing.

BIOC 5853 Metabolism

Prerequisite(s): BIOC 5753 or BIOC 4113. Reaction sequences and cycles in the enzymatic transformations of fats, proteins and carbohydrates; energy transfer, biosynthesis and integration in the metabolic pathways.

BIOC 5930 Advanced Biochemical Techniques

1-4 credit hours max 10 credit hours. Prerequisite(s): BIOC 5753, BIOC 5824 or concurrent registration, and consent of instructor. Lecture and laboratory course in advanced research techniques, designed to supplement BIOC 5824, and one credit hour is given for each five-week rotation that new graduates students do in their first semester of admission to the program. In subsequent semesters, individual research problems pursued in laboratories of Department faculty for six weeks and one credit hour each.

BIOC 6000 Research

1-15 credit hours max 60 credit hours. For Ph.D. dissertation.

BIOC 6110 Seminar

1-2 credit hours max 2 credit hours for Ph.D. or 1 credit hour for M.S. candidates.

BIOC 6723 Signal Transduction (fall, odd years)

Prerequisite(s): BIOL 3023, BIOC 3653, BIOC 4113 or equivalents or permission from instructor. Topics in this course will include classical signal transduction mechanisms including MAP kinase signaling cascades, Protein kinase A, Protein

kinase C pathways, JAK/STAT pathways, calcium signaling, the cell cycle, programmed cell death, and cell signaling in cancer. This course will have a strong focus on the primary literature and experimental strategies used in modern cell biology to investigate important questions in these areas.

BIOC 6733 Functional Genomics (spring, odd years)

Prerequisite(s): BIOC 3653, BIOC 5753, BIOC 3713, BIOC 3813, or permission from instructor. Principles and techniques of genomics technologies and their applications in basic science and applied animal and plant research. Topics include genome sequencing variation detection, transcriptomics, proteomics, metabolomics, metagenomics, systems biology, forward and reverse genetics.

BIOC 6740 Physical Biochemistry (Fall, even years)

1-2 credit hours max 2 credit hours. Prerequisite(s): One semester each of biochemistry, calculus and physical chemistry. Two independent modules dealing with applications of physical chemistry and math to biological phenomena: 1) numerical analyses and selected spectroscopic methods, and 2) thermodynamics and transport properties. *Modules may be taken together as two credits or individually for one credit.*

BIOC 6753 Epigenetics (Spring, even years)

Prerequisite(s): BIOC 5102 or BIOC 5753 or consent of instructor. Epigenetic regulation involves a complex interplay of DNA and histone modifications, chromatin remodeling and array of small RNAs. The topics include; overview of chromatin structure and gene regulation, DNA and histone modification, role of small RNAs in epigenetics including their identification, characterization, as well as their roles in plant and animal development and disease, epigenetic-based therapeutics, and the application of RNAi in plants and animals.

BIOC 6763 Nucleic Acids and Protein Synthesis (spring, even years, **currently not available**)

Prerequisite(s): BIOC 4113 or BIOC 5753. Structure and biological function of nucleic acid containing structures with emphasis on recombinant DNA methodologies, information content, nucleic acid-protein interaction, regulation and rearrangement.

BIOC 6773 Protein Structure and Enzyme Function (spring, odd years)

Prerequisite(s): BIOC 4113 or BIOC 5753. Theory of, and methods for, studying the physical and chemical basis of protein structure and function; and the enzyme catalysis, including kinetics, chemical modification and model studies. Examples from current literature.

BIOC 6783 Biomembranes and Bioenergetics (fall, even years, **currently not available**)

Prerequisite(s): BIOC 5853 or consent of instructor. Components, organization and biosynthesis of plasma, mitochondrial and photosynthetic membranes, emphasizing structure-function relationships. Mechanism of metabolites, protons and electrons transport. Energy conservation in bioenergetics apparatus such as mitochondria, chloroplasts or bacterial chromatophores.

BIOC 6793 Plant Biochemistry (fall, odd years)

Prerequisite(s): BIOC 4113 or BIOC 5753. Biochemistry of processes and structures of special importance to plants, such as photosynthesis, cell walls, nitrogen fixation, secondary metabolites and storage proteins.

BIOC 6820 Selected Topics in Biochemistry 1-3 credit hours, max 15 credit hours

Prerequisite(s): BIOC 5853. Recent Developments in Biochemistry. Subject matter varies from semester to semester; students should inquire at the Departmental office before enrolling.

Biochemistry and Molecular Biology Faculty Contact Information

For a description of each faculty member's research area see: <http://biochemistry.okstate.edu/>, click on the "Faculty" link.

RANDY ALLEN (Ardmore), Professor; Director; and Sitlington Endowed Chair; 580-244-0626; randy.allen@okstate.edu

ESTELA ARRESE, Associate Research Professor; 405-744-7505; destela@okstate.edu

PATRICIA CANAAN, Professor; 405-744-6199; patricia.canaan@okstate.edu

CHARLES CHEN, Assistant Professor; Bioinformatics Faculty; 405-744-4025; Charles.chen@okstate.edu

JUNPENG DENG, Professor; 405-744-6192; Junpeng.deng@okstate.edu

JOHN GUSTAFSON, Professor and Department Head; 405-744-6189; john.gustafson@okstate.edu

JUDY HALL, Instructor; 405-744-6204; judy.hall@okstate.edu

STEVE HARTSON, Associate Research Scientist; Director, DNA Sequencing, Mass Spectrometry and Core Facility; 405-744-6191; steven.hartson@okstate.edu

PETER HOYT, Associate Research Scientist; Director, Array & Bioinformatics Core Facility; 405-744-6206; peter.r.hoyt@okstate.edu

SHELLEY LEI, Assistant Professor; 405-744-2067; Xia.lei@okstate.edu

ROBERT MATTS, Regents Professor; 405-744-6200; Robert.matts@okstate.edu

RITA MILLER, Professor; 405-744-7732; rita.miller@okstate.edu

ANDREW MORT, Regents Professor; 405-744-6197; Andrew.mort@okstate.edu

ELLIE NGUYEN, Assistant Professor; 405-744-3334; ellie.nguyen@okstate.edu

PATRICIA RAYAS-DUARTE, Professor; 405-744-6468; pat.rayas_duarte@okstate.edu

DONALD RUHL, Associate Professor; 405-744-6409; Donald.ruhl@okstate.edu

JOSE SOULAGES, Robert J. Sirney Professor of Agricultural Biochemistry; Professor; 405-744-6212; jose.soulages@okstate.edu

RAMANJULU SUNKAR, Professor; 405-744-8496; Ramanjulu.sunkar@okstate.edu

KEVIN WILSON, Associate Professor; 405-744-6810; kevin.s.wilson@okstate.edu

Adjunct Professors on OSU Campus

Adjunct Professors collaborate with Departmental faculty in research projects and can serve as a major adviser to graduate students. The adjunct faculty directs original research that has biochemical or molecular biological components. Before a graduate student of the Department begins thesis research under the direction of adjunct faculty, approval of the research project by the Department Head is required. For contact information and a description of each adjunct faculty member's research area see <http://biochemistry.okstate.edu/adjunct-faculty>, and click on the "Adjunct Faculty" link.

ROBERT BURNAP, Vaughn O. Vennerberg II Chair of Bioinformatics and Molecular Genetics; Professor; Microbiology and Molecular Genetics; Oklahoma State University; rob.burnap@okstate.edu

KITTY CARDWELL, Director, National Institute of Microbial Forensics for Food and Agricultural Biosecurity; Professor; Department of Entomology and Plant Pathology; Oklahoma State University; kitty.cardwell@okstate.edu

UDAYA DESILVA, Associate Professor; Animal Molecular Genetics; Animal Science Department; Oklahoma State University; udaya.desilva@okstate.edu

RICHARD A. DIXON, Senior Vice President and Plant Biology Division Director; The Samuel Roberts Noble Foundation, Inc., Ardmore, OK; Distinguished Research Professor at the University of North Texas, Department of Biological Sciences; Richard.dixon@unt.edu

HAOBO JIANG, Professor; Entomology and Plant Pathology, Oklahoma State University; haobo.jiang@okstate.edu

VERONIQUE A. LACOMBE, Associate Professor; Physiological Sciences; OSU Center for Veterinary Health Sciences; Veronique.lacombe@okstate.edu

JERRY MALAYER, Professor and Associate Dean for Research and Graduate Education; Veterinary Health Sciences; Oklahoma State University; jerry.malayer@okstate.edu

KENNETH MCNALLY, Senior Scientist II; Computation Biology at T.T. Chang Genetic Resources Center in the Phillipines; k.mcnally@cgiar.org

SMITA MOHANTY, Associate Professor; Department of Chemistry; Oklahoma State University; smita.mohanty@okstate.edu

CAREY POPE, Regents Professor and Sitlington Chair in Toxicology; Center for Veterinary Health Sciences; carey.pope@okstate.edu

ROLF PRADE, Professor; Microbiology and Molecular Genetics; Oklahoma State University; rolf.prade@okstate.edu

KAY SCHEETS, Adjunct Assistant Professor; Department of Plant Biology, Ecology and Evolution, Oklahoma State University; kay.scheets@okstate.edu

WILLIAM SCHNEIDER, Research Plant Pathologist; Foreign Disease Weed Science Research Unit USDA-ARS; Fort Derrick, MD; William.schneider@ars.usda.gov

LLOYD SUMNER, Professor; Samuel Roberts Noble Foundation; UDA-ARS, Fort Derrick, MD; lvsurner@noble.org

MILLION TADEGE, Associate Professor; Plant and Soil Science; Oklahoma State University; million.tadege@okstate.edu

GLENN ZHANG, Professor; Animal Molecular Biology; Oklahoma State University; glenn.zhang@okstate.edu

DNA & PROTEIN RESOURCE FACILITY

Purpose

The Facility stimulates Biomolecular Research at Oklahoma State University and throughout Oklahoma by providing instrumentation and technical expertise that are not readily available to the individual investigator. The Facility performs specialized biochemical analyses, manages a pod of multi-user equipment, provides consultations, and conducts hands-on workshops in the utilization of specific technologies. The Facility operates as a non-profit entity, providing services at or below actual costs.

Major Services

- DNA Sequencing
- DNA Fragment Analysis
- Mass spectrometry
 - ✓ mass determinations
 - ✓ protein identifications
 - ✓ differential protein expressions
 - ✓ posttranslational modifications
- Robotic liquid handling

Major multi-user equipment

- DNA Analyzer [48-capillary 3730 (Applied Biosystems)]
- Electrospray tandem mass spectrometer [LTQ Orbitrap XL (ThermoFinnegan) equipped with a nano-LC (Eksigent) and a nanospray ion source, Fusion Tribrid LC-MS/MS (Thermo-Finnegan) with an Eksigent UHPLC-nanospray]
- MALDI-TOF mass spectrometer [DE-PRO (Applied Biosystems) with reflector, CID module]

- Proteomics workstations (Mascot, Mascot Server, Mascot Daemon, Sequest, Bioworks, Peaks, Scaffold, etc.)
- Real-Time Polymerase Chain Reaction (Applied Biosystems 7500)
- Robotic solution handling
 - Biomek 2000 Laboratory Automation Workstation (Beckman-Coulter)
 - Symbiote MALDI plate spotter (Applied Biosystems)
- Digital imaging stations
- Typhoon Trio fluorescence gel imager with DeCyder2D, ImageMaster 2D Platinum, and ImageQuant TL software applications (GE Health)
- AlphaInnotech HP Imager for high-sensitivity, high resolution chemiluminescent applications, with printing, export, and quantitation
- Biotek Synergy H1 Plate Reader for UV/VIS/Fluorescence Quantitations using a wide range of Ex/Em Wavelengths
- Dionex HPLC (microbore) for various chromatographic separations
- AlphaInnotech HP Imager for routine fluorescent gel documentation, with thermal printing, file export, and quantitation
- Nano-Calorimeter and BindWorks software (Calorimetry Sciences Corp.)
- Akta Explorer FPLC (GE Health)
- 2-DE Gel Electrophoresis [Multiphor II /Ettan Dalt6 (GE Health), Protean Ixi (BioRad), and accessories]
- Hunter 2-D Peptide Mapping Apparatus

Minor multi-user equipment

DNA and protein speed vac's, UV/vis spectrophotometer, gel dryer, hybridization incubator, vacuum oven, electroporation, thermal cyclers (7, including tube, plate, and gradient), DNA fluorometer, baking oven, Stratalinker, incubators, microfuges, shakers, misc. power supplies & electrophoresis equipment, X-ray exposure cassettes, biological computing workstations, E-pure water system visible and fluorescent plate readers, automated X-ray film processor (Kodak).

Training

Workshops in Proteomics/Mass Spectrometry

Individual consultations (DNA, RNA & protein techniques)

Personnel and Contact Information:

Dr. Steve Hartson, Facility Director

(405)744-6191

shartson@okstate.edu

Janet Rogers, Lab Manager & Mass Spectrometry Specialist

(405)744-9327

jrogers@okstate.edu

OSU GENOMICS AND PROTEOMICS CENTER

Purpose

The Department sponsors several core facilities to support biochemical research on the OSU campus. The facility provides instrumentation and technical expertise that are not readily available to the individual investigator, including specialized biochemical analyses, a pod of multi-user equipment, consultations, and hands-on workshops in specific technologies.

The core facility's DNA sequencing and mass spectrometry instruments represent cutting-edge investments in OSU research capabilities. Students can operate the instruments individually, or they can utilize core services. Major services include: mass spectrometry (differential protein expression, protein identifications, post-translational modifications, etc.), DNA sequencing (Sanger), and DNA fragment analysis/genotyping.

The core facility also manages a pod of shared instruments, including 2 Q-PCR instruments, chemiluminescence and fluorescence imaging, a 96-well plate reader with UV/vis/fluorescence and other assay modes, a nano-calorimeter, a multi-user HPLC, DNA and protein speed vac's, gel docs, UV/vis spectrophotometer, electroporation, thermal cyclers (6, including tube, plate, and gradient), and an E-pure water system (Millipore), et al.

Workshops in mass spectrometry and proteomics are offered annually. Optional course credit is available.

The Genomics core facility provides next-generation sequencing with an Illumina NextSeq 500 instrument capable of most sequencing technologies available through Illumina. The instrument can produce 120-billion base-pairs of sequence data per 28 hours. Full-time Ph.D.-level specialists operate the sequencing and data management. Service and training for bioinformatics support to researchers across campus, including access to the latest software for data acquisition and analysis. Modern liquid handling for high-throughput assays, and legacy microarray technologies are available.

Major Services

- Illumina 500 NGS sequencing, including whole genomes, metagenomes, transcriptomics and more.
- Assembly and annotation of genomes and transcriptomes.
- Extensive bioinformatics services from experimental design to data analysis.
- Functional annotation, pathway analysis, and metabolic profiling.
- Robotic liquid handling.
- DNA microarray production of custom libraries.

Major multi-user equipment

- Illumina NextSeq 500 sequencer.
- GeneMachine OmniGrid 100 environmentally-controlled pin-spotting system.
- Multiple high-throughput liquid handling sample robots using nanoliters to deci-liters.
- Molecular Devices/Axon four-laser confocal microarray scanner.
- ICX-Nomadics SensiQ surface plasmon resonance instrument.

Minor multi-user equipment

- Agilent BioAnalyzer for both RNA and DNA.
- NanoDrop ND-1000 spectrophotometers and ND-3300 fluorospectrophotometer.
- RNA isolation equipment, hybridization incubator and other preparative equipment.
- Diagenode Biodisruptor and DigiLab Hydroshear.
- SciGene Hybex and other microarray incubation systems.

Software:

- Most major open source – “omics” software packages are supported for bioinformatics.

Training

Bioinformatics Workshops

Data Carpentry and Software Carpentry workshop support

Microarray technology support

Individual Consultations

Personnel and Contact Information

Dr. Peter R. Hoyt, Director, Genomics Facility	(405) 744-6206	peter.r.hoyt@okstate.edu
Dr. Steve Hartson, Director, Proteomics Facility	(405) 744-6191	steven.hartson@okstate.edu
Janet Rogers, Manager	(405) 744-6202	janet.rogers@okstate.edu
Dr. Hongjin Hwang, Sequencing Research Specialist	(405) 744-6202	hongjin.hwang@okstate.edu

Information available at: <http://microarray.okstate.edu> and <http://bioinformatics.okstate.edu>

Biochemistry and Molecular Biology Office Policies & Procedures

Office: 246 NRC, (405) 744-6189 <http://biochemistry.okstate.edu>

Home Mailing Address

It is extremely important that we keep up with your current home mailing address at all times. If your address has changed since last semester or if you are a new student, please be sure we have your current address. If your address changes during the semester, you are required to notify the office staff; then you need to notify the Graduate School, Payroll, Human Resource Services (HRS) and the Registrar's Office. For International students, according to INS policy, a "change of address" form must be filled out each time there is a change of residence. Forms are available in the Biochemistry and Molecular Biology office. This is YOUR responsibility. It is also helpful if a current telephone number is provided to the BMB office.

Keys

Keys are obtained from the Biochemistry and Molecular Biology office, 246 NRC. Students checking out keys will pay a \$5.00 refundable deposit for each key. Upon graduation, or departure, your keys must be returned to the Biochemistry and Molecular Biology Department office.

NOTE: Students are responsible for making sure office/lab doors are locked and lights are turned off.

Receipt of Paychecks

Graduate Research Assistants, Fellows, and Teaching Assistants get paid monthly on the 1st day of the month. Paychecks are distributed by direct deposit to your bank account through the University. You may fill out a direct deposit form at the Biochemistry and Molecular Biology Department office. To view your pay stub, visit the OSU Web site <http://my.okstate.edu> and click on the pay information link under the employee tab. Follow the directions posted on that sight to view your pay stub. You will need your O-Key login to log into this site.

Photocopying

The copy machine is available on the 2nd floor 246 NRC. Photocopying is subject to copyright laws; it is your responsibility to be aware of them. You can access the copier with a code provided by your PI. THE PHOTOCOPY MACHINE USE SHOULD BE LIMITED TO ACTIVITIES APPROVED BY YOUR PI.

Thesis/Dissertation Expenses

Students are responsible for all costs pertaining to the preparation and finalization of their thesis/dissertations (copies/binding, special paper, etc.).

Travel

Travel arrangements must be cleared with appropriate office staff first. Provide the appropriate support person in the Biochemistry and Molecular Biology office with all of your travel information. This is initially done by filling out a travel request form (blue slip). When you've returned from a trip, you must complete a travel voucher (pink slip), available from the Department. There will not be any out of pocket expense reimbursement until pink slip is completed and returned to the appropriate support person with all of your original receipts.

Mail Boxes

Mail is delivered to a single location in room 246G NRC at approximately 9:00am Monday through Friday. Check these boxes regularly. Packages are delivered throughout the day. When sending packages via UPS, FedEx or DHL, you must fill out a shipping form from mail services; either have mail services pick up the package or take it to mail services yourself. Permission from a faculty member is required before sending any packages. No personal mail shall be sent to the office.

P-Card Information

Please obtain written permission from your P.I. before requesting a university purchasing card (p-card). See appropriate office personnel for p-card request paperwork, explanation of p-card logs and reporting procedures, and information about p-card training.

Appendix II Graduate Assistantships

Paperwork

Go to the Department of Biochemistry and Molecular Biology office and complete the following forms so you can be put on the payroll:

- Federal and State tax forms
- I-9 form. You will need to show two forms of identification such as a driver's license and social security card. Foreign students will need passports and other certificates. Please check with Melissa West in the Administrative Office to verify the forms of ID that will be needed.

If you have worked on campus within the last 6 months, you may not need to complete all of the forms.

International students on F-1 or J-1 visas also must complete the Certificate of On-Campus Employment Eligibility from the International Student Office and return it to the Graduate College. You will not be paid until you have returned the necessary forms.

Payroll Signup

International Students: Prior to signing up on payroll you will need to get a Social Security Letter from the Social Security Administration Office. The ISS office will give you the needed forms to obtain this letter. Within ten days after arriving in the United States, you will need to apply for a social security card. You will receive your social security card within approximately two weeks of application.

International Student Documentation for Payroll Signup

- Social Security Card
- Passport
- Work Permit (ISS 076 Student Union will provide this for you)
- I-9 (ISS 076 Student Union will provide this for you)
- W-4 (ISS 076 Student Union will provide this for you)
- Voided Check from Checking or Savings Account

Domestic Student Documentation for Payroll Signup

- Social Security Card
- Driver's License/or other approved photo ID
- Voided Check from Checking or Savings Account

Payroll Advice

OSU processes more than 180,000 paychecks to approximately 17,000 individuals each year. Each paycheck requires numerous transactions and calculations, which could involve earnings, taxes, deductions, and benefits. Although the system provides many checks and balances, errors can occur. **As part of the payroll process, OSU provides the Payroll Advice for employees to review and verify data immediately. Failure to notify Payroll Services or Human Resources of problems may delay your pay or result in benefit problems.**

The Oklahoma PayCard

The Oklahoma PayCard provides a new convenience for state employees who do not have a bank account for direct deposit of their paycheck. Now, instead of being forced to find a place to turn your paycheck into cash, you will have the electronic convenience of the Oklahoma PayCard.

Oklahoma law (74 O.S. 292.12) requires that all new state employees use direct deposit to receive their pay. Employees who do not have an account at a financial institution to receive their pay can use the Oklahoma PayCard.

How to Sign Up for a PayCard (with approval of advisor)

To sign up for the PayCard, simply fill out a direct deposit form and mark the PayCard option. Be sure to fill out all the demographical information as well. Submit this deposit form to Melissa West in the Administrative Office, located in 246 NRC. Your PayCard will be sent to you via mail from MoneyNetwork. **When you get your PayCard, please notify Payroll Services so that we can start funding your PayCard.**

E-mail notifications

An e-mail notification will be sent to all employees processed in a payroll calculation. The e-mail will inform the employee that he/she has been included in a particular payroll calculation with a specified issue date. It will also include the net pay

along with the check distribution/bank name. A link to Web for Employees will be provided on the e-mail or employees can access Web for Employees directly through the internet at: <https://my.okstate.edu>
The e-mail will also contain a section of Notifications and Announcements. This will contain important information about pay and benefits.

Accessing Web-for-Employees

WebforEmployees can be accessed by going to my.okstate.edu and using an employee's O-Key user-ID.

To access pay information for a particular payroll, click on the Payroll tab, then click on Payroll Advice. Select the Check Year and click on the Select button. Select the Check Date and click on the Select button. To view leave information, click on the Employment tab, then click on Leave Balances. This will provide the employee with a table of vacation, comp time, sick leave, and extended sick leave balances.

You will be paid on the last working day of each month. If the last day falls on a weekend, payday will be on the following Friday. All pay is distributed by direct deposit to your bank account through the University. You may fill out a direct deposit form at the Biochemistry and Molecular Biology office in 246 Noble Research Center at the time of your hire. The only exception is the month of December. In December you will be paid on the last working day before the Christmas break, and your next payday will not come until the end of January. This is about a six-week gap, so it will be imperative for you to budget your finances to allow for the extra time between pay periods.

Work Assignment

Your hours of work depend on the arrangements you make with your PI. Records are not sent to the Graduate School or payroll office. You are accountable to your PI for your time and will be requested to complete a time-log for internal Departmental use through my.okstate.edu that your PI will have to sign off on every month.

Billing

Tuition scholarships will be credited to your Bursar account during the registration period. You are responsible for all required fees. Be sure you have paid your portion or arrange for deferred payment with the Bursar's Office before the payment deadline. If registration fees are NOT paid by the advertised deadline, a late charge is assessed. Also, be sure to let the Graduate School know if you make any changes (drop or add) in your schedule.

Term of Appointment

Appointments are renewable each semester, contingent upon satisfactory academic progress toward a degree and satisfactory work performance as well as available funding. If your initial appointment covered two semesters, you will receive a notification letter when it is time to renew. If your initial appointment was for one semester, ask your PI if it will be continued. If not, and if you are interested in finding another appointment, speak to the Graduate School as soon as possible.

Oklahoma State University Policies

Equal Opportunity / Affirmative Action

It is the policy of the Oklahoma State University:

1.01 To be a complete equal opportunity University in all phases of operations, toward the end of attaining the University's basic mission and goals.

1.02 To provide equal employment and/or educational opportunity on the basis of merit and without discrimination because of age, race, ethnicity, color, sex, religion, national origin, sexual orientation, veterans' status, or qualified disability.

1.03 to subscribe to the fullest extent to the principle of the dignity of all persons and their labors; in support of this principle, sexual harassment is condemned in the recruitment, appointment, and advancement of employees and in the evaluation of students' academic performance.

1.04 to apply equal opportunity in the recruitment, hiring, placement, training, promotion, and termination of all employees; and to all personnel actions such as compensation, education, tuition assistance, and social and recreational programs. The University shall consistently and aggressively monitor these areas to ensure that any differences which may exist are the results of bona fide qualification factors other than age, race, ethnicity, color, sex, religion, national origin, sexual orientation, veterans' status, or qualified disability.

1.05 To ensure that each applicant who is offered employment at the University shall have been selected on the basis of qualification, merit, and professional ability.

1.06 to provide and to promote equal educational opportunity to students in all phases of the academic program and in all phases of the student life program; and shall consistently and aggressively monitor these areas to ensure that any differences which may exist are the results of bona fide factors other than age, race, ethnicity, color, sex, religion, national origin, sexual orientation, veterans' status, or qualified disability.

Student Disability Services

Student Disability Services at Oklahoma State University provides support services to students with documented disabilities. Our goal is to provide assistance that will allow equal opportunity and equal access to education for each individual student. Academic support services include specialized testing, classroom accommodations, recorded textbooks, technological assistance, and other services as necessary. Students may ask for services by contacting Student Disability Services: <http://sds.okstate.edu/>

Oklahoma State University is a tobacco-free campus policy

1.01 The Oklahoma Smoking in Public Places and Indoor Workplaces Act, 63 O.S. 2003, SS 1247; 1-1523; 1-1525, et.seq., requires Oklahoma State University to adopt policies regulating smoking in facilities owned, leased or under the control of the University. The Act prohibits the possession of lighted tobacco in any indoor place used by or open to the public, public transportation, or any indoor workplace, except where specifically allowed by law and allows educational facilities to adopt more restrictive policies regarding smoking and the use of other tobacco products in the buildings or on the ground of the facilities. These Policy and Procedures are adopted to implement that requirement. <https://americashealthiestcampus.okstate.edu/policies>

Policies and General Information

Tuition, Fees and financial obligations

Payment Deadline

Introduction and General Statement

1.01 Enrollment at Oklahoma State University incurs certain obligations and commitments on the part of an individual student, one of which is the student's responsibility to pay all financial accounts owed to the University in a timely manner.

1.02 Further, the University has an obligation to make a reasonable endeavor to inform its students of how financial commitments can be fulfilled and to administer its collections process in a professional manner, using good judgment and reasonable compassion for its students.

1.03 Therefore, the following policy and procedure has been adopted to assist the students in understanding and meeting their financial obligations and to guide University officials in administering the collection of fees, tuition and other charges.

POLICY

2.01 It is the policy of Oklahoma State University that in order to remain in good financial standing with the University and thereby continue to participate in its educational programs, services and benefits, all charges are due by the 15th of the month following the date of the charge unless a deferred payment arrangement has been implemented.

2.02 Accounts not cleared by their respective due dates are delinquent and shall be subject to the following action:

A. Delinquent accounts are subject to a late payment penalty at the rate of 1½% monthly on the unpaid balance.

B. All delinquent accounts shall result in a "hold" being placed on the student's academic record, thereby preventing pre-enrollment, subsequent re-enrollment, transcript release, or diploma release until the account has been cleared.

C. The passing of a check to the University, which is not honored by the financial institution against which it is drawn, may result in the cancellation of the student's enrollment for failure to pay a delinquent account.

PROCEDURE

3.01 Immediately following the due date for the fall and spring semesters, the University Bursar shall make a reasonable endeavor to notify the student that the account is past due and a late payment penalty has been assessed. This may be in the form of a billing statement, letter, or electronic format.

3.02 A student who has a delinquent account may enroll for the subsequent semester and grades earned for the previous semester recorded if the delinquent account plus any penalties are cleared prior to the beginning of the next semester or reasonable arrangements have been made to settle the account in a timely manner.

3.03 To clear the account, the student must pay the delinquent account plus all penalties in full.

General Information and Student Services

OSU Academic Services

405-744-5333

<http://uas.okstate.edu>

Car Registration and Parking

Accessible Parking Permits

405-744-6523

www.parking.okstate.edu

Disability Support Services

405-744-7116

<http://sds.okstate.edu/>

Books

Student Union Bookstore

405-744-5237

<http://Universitystore.okstate.edu>

REGULAR BOOKSTORE OPERATING HOURS

Monday-Thursday 8:00am-6:00pm

Friday 8:00am-5:00pm

Saturday 10:00am-4:00pm

Sunday CLOSED

OSU ID Services Office

www.it.okstate.edu/services/id/

E-mail: id-svcs@okstate.edu

University Health Services

1202 W. Farm Rd.

Stillwater, OK 74078

Phone: 405- 744-7665

<http://Uhs.okstate.edu>

University Health Services is an outpatient ambulatory care facility designed to provide cost effective, physician directed health care and health information. The primary focus of the University Health Services is to provide primary health care with services including general medicine, gynecology, simple surgery and sport medicine. The University Health Services also provides students and visitors with information regarding current Health Issues via the "**Important Information and Links**" along with telephone numbers for inquiries about our services.

Postal Services

Need to mail a letter or pay a bill? You can buy stamps from the US Post Office located at the Student Union.

Where Do I Find...

OSU POLICE DEPARTMENT

1st Floor, USDA Bldg.

(405) 744-6523

<http://www.osupd.okstate.edu>**REGISTRAR**

322 Student Union

(405) 744-6876

<https://registrar.okstate.edu>**RESIDENTIAL LIFE**

(405) 744-5592

<http://www.reslife.okstate.edu>**SCHOLARSHIPS AND FINANCIAL AID**

119 Student Union

(405) 744-6604

<http://www.okstate.edu/finaid/>**STUDENT DISABILITY SERVICES**

315 Student Union

(405) 744-7116

<http://www.okstate.edu/ucs/stdis/index.html>**STUDENT GOVERNMENT ASSOCIATION**

211Q Student Union

(405) 744-6500

<http://Sga.okstate.edu>**STUDENT UNION BOOKSTORE**

120 Student Union

(405) 744-5237

<http://Universitystore.okstate.edu>**UNIVERSITY ASSESSMENT AND TESTING CENTER**

101 UAT Building

(405) 744-5958

<http://><http://Uat.okstate.edu/testing>**UNIVERSITY COUNSELING SERVICES**

320 Student Union

(405) 744-5458

<http://okstate.edu/ucs>**UNIVERSITY HEALTH SERVICES**

1202 West Farm Road

405-744-7665

<http://uhs.okstate.edu>

Information Technology - Appropriate Computer Use Policy

www.it.okstate.edu/policies/

Edmon Lowe Library

405-744-9775

ACADEMIC & CAREER DEVELOPMENT CENTER

013 University Health Services

(405) 744-6434

<http://www.okstate.edu/ucs/acdc.html>**ADMISSIONS OFFICE**

800-233-5019 ext. 1 (in state)

800-852-1255 (out-of-state)

<http://admissions.okstate.edu>**ALCOHOL & SUBSTANCE ABUSE CENTER**

320 Student Union

(405) 744-2818

<http://Ucs.okstate.edu/asac>**ATHLETICS TICKET OFFICE**

East Lobby, Athletics Center

(405) 744-5745

<http://okstate.com>**BURSAR**

113 Student Union

(405) 744-5993

<http://www.bursar.okstate.edu>**CAMPUS LIFE**

(405) 744-5488

<http://lcl.okstate.edu>**COLVIN CENTER/CAMPUS RECREATION**

320 N. Cleveland St.

405-744-5510

<http://Wellness.okstate.edu>**INFORMATION TECHNOLOGY**

113 Math Sciences

(405) 744-4357

<http://it.okstate.edu>**PARKING OFFICE**

1006 West Hall of Fame Avenue

(405) 744-6525

<http://www.parking.okstate.edu>

www.library.okstate.edu/

Writing Center

Phone: 405-744-6671

writingcenter@okstate.edu

<http://osuwritingcenter.okstate.edu>

Oklahoma State Directory

<https://app.it.okstate.edu/directory/>