

OVERVIEW: UNDERGRADUATE STUDENT RESEARCHERS IN UAB SOM/JHS LABS

Introduction

Many undergraduates come to UAB because of its national and international reputation in biomedical research. UAB's Carnegie Foundation classification as a 'Research University with Very High Research Activity' is a major attraction for academically gifted and highly motivated students who are applying to the University Honors Program, the Science and Technology Honors Program and other departmental programs. Providing these gifted students with an opportunity to participate in the research enterprise is an important component of the academic mission of the university. Opportunities for undergraduates to participate in basic and applied research with faculty in the SOM and JHS departments greatly expand students' options over and above opportunities for scholarship and research available in the multiple schools of the university that provide undergraduate education. The majority of students in UAB's various honors programs enter graduate or health professional programs and faculty mentors can play an important role in their professional development. Having highly motivated, academically talented undergraduates in your lab can be very rewarding for you and your research program (from Michael Sloane, PhD, Director, University Honors Program).

Undergraduate Research for Academic Credit

UAB Students

Many departments have an option for their undergraduate majors to conduct research for academic credit. These research options are required by most of the 25 departmental honors programs. Undergraduate students may participate in a research experience for academic credit by registering for appropriate undergraduate research courses (e.g., *BY398 Undergraduate Research*, *PY398 Research Practicum in Psychology*, *HON 399 Research Practicum*). Course descriptions and special guidance for undergraduate research for credit outside of the home department, for the Departments of Biology and Psychology as examples, are attached.

Typical common features of undergraduate research experiences include the following:

- Students are advised to seek out and make arrangements directly with SOM/JHS faculty regarding the nature of the research activity and the credit/effort hours.
- Students may have the option to register for 1, 2, or 3 credit hours of research in a given semester. One credit hour typically equates to 3-5 hours/week of research time.
- Programs typically do not provide explicit guidelines regarding the parameters of the research experience but provide flexibility to the research advisor to work with the student to design the project and evaluate the student's performance. The project should be designed to be completed in the semester for which the student is to receive academic credit.
- Since the student is receiving academic credit for their research, the faculty research advisor should provide legitimate research exposure and academic training rather than assign the student only to menial lab chores. This may include activities such as background reading and lab meeting participation, in addition to work conducted in the lab.
- The faculty research advisor must arrange for the student to take the necessary laboratory training appropriate to the research project (*see below*); lab-related injuries or illness are handled as described for Academic Credit Students below.
- The student should participate regularly, as agreed, in order to have a successful project.
- The faculty research advisor must provide a grade (Pass/Fail or a letter grade as required) to the program administrator responsible for the research practicum.
- Additional requirements exist for Honors Research students, as outlined on attached pages.
- Faculty wishing to advertise openings for talented undergraduates in their lab should contact the directors of the appropriate honors programs (see Resources listing).

Non-UAB Students

Undergraduate students from area institutions may have the opportunity to participate in research for credit at off-campus locations including UAB (see Birmingham Southern College, Department of Biology *Directed Research* example <http://www.bsc.edu/academics/biology/research/index.cfm>).

- Guidelines for parameters of the research project and student evaluation should be discussed with faculty liaison at the sponsoring institution.
 - Visiting student should be assigned “Volunteer” status (code 60) in order to receive Blazer ID access
 - Faculty advisor must arrange for the student to take the necessary laboratory training appropriate to the research project (*see below*)
 - Lab-related injury or illness is handled as indicated for Academic Credit Students below
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Undergraduate Research for Employment**UAB Students**

- Students who are currently enrolled in a degree program at UAB may be hired as a paid student employee, with the title “Student Assistant”; UAB students enrolled for credit in a Spring semester may be hired as Student Assistant during the following Summer without formal UAB enrollment
- Student Assistants are paid on an hourly basis and not subject to effort reporting if on a timesheet
- Student Assistant employees should not receive academic credit for the compensated effort; if the student desires academic credit they should perform an additional project specifically for credit, in accord with Biology or Psychology department guidelines
- The faculty employer must arrange for the student employee to take the necessary laboratory training appropriate to the research project; lab-related injury or illness is handled as indicated for Employee Students below

Non-UAB Students

- Students who are not currently enrolled at UAB are not eligible for “Student Assistant” status but may be hired as Lab Assistant (Irregular Employee 04)
 - Training and lab injury issues are handled as for Employee Students below
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UAB Undergraduate Summer Research Programs

- Summer research program students are typically recruited from other institutions and would be identified as Lab Assistant employees as above.
- Each program typically provides guidance, administrative processing, and student and mentor expectations for the research experience.
- Faculty research advisor arranges for the student employee to take the necessary laboratory training appropriate to the research project; lab-related injury or illness is handled as indicated for Employee Students above.

Current UAB Summer Research Programs

- NSF Research Experience for Undergraduates (REU): Experimental and Computational Materials Research (Physics department)
 - NSF Research Experience for Undergraduates (REU): Using the Social Sciences, Natural Sciences, and Mathematics to Study Crime
 - NSF Research Experience for Undergraduates (REU): Ethnoarcheology in Fiji
 - UAB Summer Program in Neurobiology (SPIN) (NSF REU award)
 - Summer Intern Research Program in Genetics
 - Summer in Biomedical Science (SIBS)
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Training and Protection Issues

- Faculty research advisors must arrange for or verify that the undergraduate student, whether participating for academic credit or for pay, has the necessary laboratory training appropriate to the research project, including
 - HIPAA training
 - IACUC Use and Care of Laboratory Animals
 - OH&S Biosafety and Chemical Safety
 - IRB Training in Research with Human Participants

Undergraduate students can access the online training materials through the UAB Faculty & Staff Learning System (FSLs, formerly HealthStream). Students will be able to access all of these modules using their blazer ID (except HIPAA training). <http://www.uab.edu/learningsystem/>

Injury Response

- **Non-Employed academic credit students and Non-credit earning Students/Volunteers** may be seen at the UAB Hospital Emergency Room and, as a courtesy, the ER charges will be waived (but return visits and/or referrals may not be covered) for lab injuries occurring at UAB; additional treatment or services must be provided by the student's health care provider, including Student Health if enrolled, and expenses are the responsibility of the student and/or her health insurance provider. All incidents involving students, volunteers or other visitors must be reported to Risk Management.
- **Employee students** are covered for lab injuries through UAB HRM On-The-Job-Injury/Illness Program and must be seen at The Workplace (for non-severe injuries during business hours) or at the University Hospital or UAB Highlands Emergency Room (for urgent care and after-hours) without charge; Refer to the Benefits page of the UAB Human Resources website for instructions regarding the On-The-Job-Injury Program; they must enroll in the UAB OHS program

Liability Coverage

- **Employees, Enrolled Students, and Non-credit earning Students/Volunteers** which includes students not seeking undergraduate research credit or students volunteering in labs over the summer may be covered under the Comprehensive General Liability Trust Fund for third party liabilities. Students should be currently enrolled for the next academic term and have all appropriate safety training appropriate to the research project.
- Lab access, i.e., keys and key cards, should be provided to undergraduate students on a case-by-case basis, depending on student's need and capability for independent activities in the lab.

Resources

UAB Biology Contacts

Academic Advisors

Ovuke' Emonina	oeonia@uab.edu	(205) 975-4362
Tyna M. Adams	tmadams2@uab.edu	(205) 934-6025

Biology Honors Program

Thane Wibbels, PhD	twibbels@uab.edu	(205) 934-4419
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Chair, Department of Biology

Steven Austad, PhD	austad@uab.edu	(205) 934-9685
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UAB Psychology Contacts

Academic Advisors

Jenny Farnham farnhamj@uab.edu (205) 934-6135
 John Gampher, PhD redfox@uab.edu (205) 934 3850

Psychology Honors Program

Michael Crowe, PhD mgcrowe@uab.edu (205) 934-3850

Director of Undergraduate Studies, Department of Psychology

Maria Hopkins, PhD mhopkins@uab.edu (205) 975-9456

Chair, Department of Psychology

Karlene E. Ball, PhD bethany@uab.edu (205) 934-2610

UAB Honors Programs Contacts

Honors College, Interim Director

Julio Rivera, PhD jrivera@uab.edu (205) 934-8668

University Honors Program, Director

Michael E. Sloane, PhD sloane@uab.edu (205) 934-8733

Science and Technology Honors Program, Director

Diane Tucker, PhD dtucker@uab.edu (205) 934-8885

Global & Community Leaders (GCL) Honors Program, Associate Director

Becky Reamey reamey@uab.edu (205) 934-8683

Experiential Learning Scholars Program (ELSP) Honors Program, Program Manager

Amy Atkisson amyatkisson@uab.edu (205) 934-3871

Other Resources

Training

UAB HIPAA www.hipaa.uab.edu (Marilyn Thomas, mcthomas@uab.edu, 934-9564)
 Occupational Health & Safety <http://www.uab.edu/ohs>
 IACUC Training <http://www.uab.edu/research/administration/offices/iacuc/Pages/default.aspx>
 934-7692/7880
 IRB Training <http://www.uab.edu/research/administration/offices/irb/Pages/Home.aspx> 934-3789

Lab Injuries/Illness

UAB Employee Occupational Health Program
http://www.healthsafe.uab.edu/pages/home/occupational_health/default.html

Incident and Injury Reporting
<https://riskmgmt.hs.uab.edu/forms.html>

UAB Hospital Emergency Room, North Pavilion
 18 St South & 6th Ave (Walk-in Emergency entrance on 18th St S)
 934-5100

Student Health Service <http://www.uab.edu/studenthealth/>
 930 20th Street South, Suite 221
 (205) 934-3580

The Workplace <http://www.uab.edu/medicine/physicalmedicine/about/workplace-highlands>
 UAB Highlands

1201 11th Avenue South, Suite 100
205-933-5300

Risk Management <https://riskmgt.hs.uab.edu/index.html>
934-5382 (Insurance and Liabilities, Jeanine Bailes, jbailes@uabmc.edu, 205-934-5552)

UAB Human Resource Management

Policy 118 – Hiring Temporary/Irregular Employees <http://main.uab.edu/show.asp?durki=44405>
Policy 119 – Employment of Students <http://main.uab.edu/show.asp?durki=44406>
Employment Division (205)934-5246

Office of Graduate Biomedical Sciences

Susan Rich, GBS Director-Administrative, srich@uab.edu, 996-4835

UAB Department of Biology

Overview for JHS/SOM Faculty - Undergraduate Biology students may participate in a research experience for academic credit by registering for BY398 Undergraduate Research or BY498 Honors Research. The course descriptions and special guidance for undergraduate research for credit outside of the Department of Biology follow the overview and were provided by Ovuke' Emonina, Academic Advisor, Department of Biology, oemonia@uab.edu, (205) 975-4362.

Typical features include the following:

- Students must have completed at least 12 hours of Biology and have a 3.0 GPA in Biology and 3.0 GPA overall
- Students may take a maximum of 3 credits, with one credit hour equating to 3-4 hours/week in the lab
- Students are advised to seek out and make arrangements directly with SOM/JHS faculty regarding the nature of the research activity and the credit/effort hours
- Biology Department does not have explicit guidelines regarding the parameters of the experience but provides flexibility to the faculty research advisor to design the project and evaluate the student's performance.
- Faculty research advisor is responsible for informing a Biology Academic Advisor (see attached) of the research activity, including provision of a brief project description for Biology records, and for signing the registration form
- Faculty research advisor must arrange for the student to take the necessary laboratory training appropriate to the research project (see below)
- Faculty research advisor is expected to provide legitimate research exposure rather than assign the student to menial lab chores;
- Highly recommended that a fine-tuning discussion occur after 2-3 weeks to increase the likelihood that both student and research advisor will have a successful project experience
- Student is expected to participate regularly as agreed in order to have a successful project
- Student is expected to provide the faculty research advisor with a brief report (1-2 page) on the research activity at the semester end, which is intended as a record for Biology files(not for grade); the faculty research advisor may require other written material as part of the student's evaluation which may instead be provided to Biology as their record document
- Faculty research advisor provides the brief report and a letter grade to the Biology Chair (Robert Thacker, PhD, Interim-Chair,2012)
- Additional, more extensive requirements exist for Honors Research students, outlined on the attached pages

BY 397 (Advanced Directed Readings)

A student may apply a maximum of 3 semester hours of BY 397 to their Biology major degree requirements.

Requirements to Enroll: Student must have completed at least 12 hours of Biology and have a 3.0 GPA in Biology with a 3.0 overall GPA. Permission of instructor is required to register (student must have the instructor email a BY advisor in order to enroll).

Best Practice: For every one semester hour, a student should write a 10 page paper on the topic which s/he was assigned to research.

BY 398 (Undergraduate Research)

A student may apply a maximum of 3 semester hours of BY 398 to their Biology major degree requirements.

Requirements to Enroll: Student must have completed at least 12 hours of Biology and have a 3.0 GPA in Biology with a 3.0 overall GPA. A mentor should be obtained prior to registering (student must obtain a Student Research Profile form from their Biology Academic Advisor and return the completed form to their advisor before registration can occur).

Best Practice: For every one semester hour, a student should spend 3-4 hours per week in the lab/field performing research, data analysis, etc.

BY 498 (Honors Research)

A student must complete a total of 6 semester hours of BY 498 in order to graduate with Departmental Honors. A student must apply at minimum and at maximum 6 semester hours of BY 498 to their Biology major degree requirements.

Requirements to Enroll: The student must meet requirements and be admitted into the Biology Honors Program (student should meet with Dr. Thane Wibbels or a Biology Academic Advisor to review their qualifications). A mentor should be obtained prior to registering (student must obtain a Student Research Profile form from their Biology Academic Advisor and return the completed form to their advisor before registration can occur). At the conclusion of their first semester, a formal research proposal including an introduction, proposed methods, and relevant literature citation is due to the professor and Dr. Thane Wibbels. At the conclusion of the student's research, a formal written report in the form of a scientific paper is due to their professor and Dr. Thane Wibbels (a small scale version/printout of the student's poster may substitute for the scientific paper). Also, a poster presentation is required at either the Biology Honors Poster Presentation Day/UAB Expo or a Regional/National conference during their final semester of Honors Research.

Best Practice: For every one semester hour, a student should spend 4 hours per week in the lab/field performing research, data analysis, etc. Typically, most students register for 3 semester hours of Honors Research for two consecutive semesters.

See Documents Below for Further Information on Honors Research

Subject: Information and Guidelines for Department of Biology Honors Research
BY 498

Purpose: The Department of Biology Honors Research Program provides an opportunity for intelligent and motivated students to develop research skills in preparation for graduate school and/or professional careers. A Biology Honors project requires a significant amount of time and commitment from both the student and the faculty sponsor.

Prerequisites:

In order to be accepted into the Biology Honors Program, a student must meet the following criteria:

- 1) Junior Standing (64 hrs)
- 2) Minimum of 18 hours completed in Biology courses
- 2) GPA of 3.5 in Biology courses
- 3) GPA of 3.0 overall
- 4) Commitment of a faculty member to act as the student's mentor
- 5) Minimum of 1 hr of BY 398

Requirements Necessary to Complete the Biology Honors Program:

- 1) Minimum of 6 credit hours of BY 498 (Honors Research)
- 2) Submission of a formal research proposal regarding the student's Honors Research Project. The proposal must be submitted to the Honors Committee and should include a synopsis of the proposed research including an introduction, proposed methods, and relevant literature review. This proposal should be submitted toward the end of the first quarter or start of the second quarter of the Honors Research.
- 3) A formal poster presentation of the results of the research at the annual Biology Honors Research Day held at the end of the spring quarter. Under special circumstances, the results may be presented at other times of the year pending approval of the Honors Committee.
- 4) A written final report summarizing the results of the student's Honor's Research.

Biology Honors Research (BY 498)

General Information for Research Proposal

Submission Time:

Generally the student will submit the proposal by the end of the first semester of research.

Length:

Length varies, but we typically the proposals have a minimum of approximately 5 pages of text, double spaced

Format:

You can use a variety of different formats (for example, you could follow the format of a specific scientific journal).

Proposal Should Include:

- 1) Title Page, include the project title, your name, your mentor's name, and date.
- 2) Introduction
Background information on your research subject.

Significance of why your research is of interest (i.e. Why it is important?).
Include citations of any relevant references.

3) Proposed Research

Give a general description of the research that you propose to complete.
This can include a “Methods and Materials” type of section in which you:

- 1) Describe how you will complete your research.
- 2) Include the specific design of your experiments.
- 3) Include citations of any relevant references.

4) Expected Results (this is optional, since this may be covered in the introduction and proposed research). You do not need to provide any actual results. You will provide the results when you give your final poster presentation at the UAB EXPO.

5) Reference Section: List all references that you cited within the text of the proposal. There are a variety of formats for references. Choose a format based on the typical journal where you would publish your research.

Final Notes

Most freshmen will not qualify to perform undergraduate research for credit. University Honors students who are freshmen may be able to perform research for credit through the University Honors Program, but should first consult their Biology Academic Advisor and the Director of the University Honors Program for specific requirements to register.

If you have a remarkable student who is doing great research in your lab and who you know to be a good student, please let us know. There are national scholarships which they may qualify to apply for (Goldwater, Marshall, Rhodes, Fulbright, etc) and the Department of Biology will help them obtain more information.

Finally, if you have any questions, whatsoever, please do not hesitate to call or email Ovuke' Emonina, Biology Academic Advisor, (205) 975-4362 or oemonia@uab.edu.

Thank you for supporting students in their quest for knowledge!

UAB Department of Chemistry

Chemistry is an experimental science. The laws and theories you learn in your chemistry courses are based upon research. To truly understand chemistry, it is necessary to appreciate how research is carried out. Many chemistry majors go on to careers that involve or are based on research. Participation in research allows you to decide whether you enjoy research and thus to make more informed career choices. Strong, professional relationships with research mentors provide you with important insights into career choices, and enable faculty members to write stronger recommendation letters for you for graduate and professional schools. Research may also qualify you for certain scholarship and award competitions, consideration for publication of research results in scientific journals, and presentation of research results at scientific meetings. Any or all of these are impressive on applications and during interviews for graduate/professional schools or employment.

There are three types of undergraduate research credit available in the UAB Chemistry Department.

CH 297 (1 SH): **This credit requires about four research lab hours per week in fall or spring, or five hours per week in summer (50 hours total for one semester), although the research mentor may require more.** The proposal form must have written approval from the faculty mentor (who may require prior completion of certain courses with certain grades, and determines the criteria and schedule for successful completion of the work), the chemistry dept. advisor, and the chemistry dept. chairman, and the GPA (a 2.5 or higher GPA in chemistry) must be verified at the end of the term prior to beginning the research credit, before the student may register for CH 297. GPA and mentor approval are re-verified at the end of each term before the student can register for subsequent CH 297 credit.

CH 497 (3 SH): **This ideally includes a minimum of six credit hours (two semesters, preferably consecutive)** under the supervision of a faculty member mentor, who determines the criteria and schedule for successful completion of the work. These criteria include an average of about 11 research lab hours per week in the fall or spring, or 15 hours per week in the summer (always **150 hours total per semester**), although the mentor may require more. The schedule should be discussed by the mentor and student prior to registering for credit. The chemistry department and/or the mentor will require the student to write an abstract/report on the research progress, and guidelines for the report are provided after the semester begins (or earlier upon request). **The student must have at least a 2.5 overall GPA and at least a 3.00 overall GPA in chemistry courses,** and may need to have completed certain courses with certain grades (as determined by the mentor) **before signing up for CH 497.** The proposal form must be signed by the mentor, the chemistry dept. advisor, and the chemistry dept. chairman, and GPAs must be verified at the end of the term prior to beginning the research credit, before the student may register for CH 497. GPAs and mentor approval are re-verified at the end of each term before the student registers for subsequent research credit.

CH 499 ~ Honors Research (3 SH): Students normally take CH 497 (usually two or more consecutive semesters) and then CH 499 under the supervision of the mentor. **The student must have an overall GPA of 3.0, a 3.25 GPA in Chemistry,** and sufficient progress in research (as determined by the mentor) to participate in Honors Research. The student then meets with Dr. Gary Gray to apply before registering. The application form includes a one page abstract describing the content of the student's proposed Honors Thesis, and must be signed by the student's research mentor, two faculty advisors (honors thesis committee), and the Honors Director PRIOR TO registration for CH 499. During CH 499 the student writes an Honors thesis, of chemistry research journal quality, which is submitted in written form and presented orally to the committee.

(FORENSICS research may begin or end with CH 297, a one-credit, ideally full-time internship in a local, state, or federal crime lab. This will normally occur during summer, and may have prerequisites specified by the individual lab. The remaining semester of CH 497 and optional CH 499 can be completed at the same lab or at UAB.)

ALL OF THESE REQUIRE A WRITTEN PROPOSAL APPROVED BY VARIOUS PEOPLE BEFORE YOU CAN BE REGISTER for the credit. The earlier you start the process, the more likely it will be approved in time! **TO BEGIN the process,** contact Mr. Grimes at chemadvise@uab.edu and/or chemistry professors for referrals to potential mentors. After a mentor agrees to allow you to participate in research in his or her lab, **EMAIL MR. GRIMES A PROPOSAL (usually a paragraph or two) INCLUDING ALL OF THE FOLLOWING** (which you learn about from the mentor) items. Show your proposal to the mentor first if practical.

- **THE NAME AND DEPARTMENT OF THE FACULTY MENTOR**
- **AN OVERVIEW OF THE RESEARCH PROJECT AND YOUR ROLE IN IT**
- **THE SPECIFIC PROCEDURES YOU WILL CARRY OUT (two or more examples)**
- **THE EQUIPMENT YOU WILL USE (two or more examples)**
- **THE TIMELINE OF WHEN YOU WILL LEARN WHAT (brief; not comprehensive)**
- **HOW MANY HOURS YOU PLAN TO WORK, ON AVERAGE, IN THAT LAB**

- **WHICH SEMESTERS YOU PLAN TO CARRY OUT THE RESEARCH**
(tentatively)

UAB Department of Psychology

Overview for JHS/SOM Faculty - Undergraduate Psychology students may participate in a research experience for academic credit by registering for PY398 Research Practicum in Psychology. The course descriptions and special guidance for undergraduate research for credit outside of the Department of Psychology follow the overview and were provided by Maria Hopkins PhD; Director of Undergraduate Studies, mhopkins@uab.edu, (205) 975-9456.

Typical features include the following:

- Students may take a maximum of 18 credits of PY398, PY397 (community practicum), and PY396 (teaching practicum) combined, with one credit hour equating to about 3 hours/week of research time
- Students are advised to seek out and make arrangements directly with faculty regarding the nature of the research activity and the credit/effort hours
- The Psychology Department does not have explicit guidelines regarding the parameters of the experience, but provides flexibility for the faculty member to work with the student to design the project and evaluate the student's performance.
- Student is responsible for completing a research plan at the start of the semester. That plan, which is typically 1-3 paragraphs, must receive signed approval from the faculty advisor and then be submitted to a psychology department advisor
- Faculty research advisor must arrange for the student to take the necessary laboratory training appropriate to the research project
- Faculty advisor is expected to provide legitimate research exposure rather than assign the student only to menial lab chores
- Student is expected to participate regularly as agreed in order to have a successful project
- Student is expected to complete a log of research-related activities throughout the term. At the end of the term, it should be submitted to the faculty research advisor for review and approval. The faculty research advisor is required to assign a grade for the student's work and submit the form to a psychology department advisor, who will work with the Psychology Department's Director of Undergraduate Studies to submit the grade to the UAB Registrar
- Slightly more complex requirements exist for Honors Students, who must complete a written honors thesis under the context of PY398 registration (contact the Director of the Psychology Honors Program, Mary Boggiano, boggiano@uab.edu, 934-8745, for requirements)

PY 398 (Undergraduate Research)

A student may apply a maximum of 18 semester hours combined of PY 396, PY 397, and PY 398 to their Psychology major degree requirements.

Requirements to Enroll: There are no explicit requirements besides approval of a research plan by an approved faculty mentor. Almost all UAB faculty members (in all departments) and most graduate students and post-docs are approved as mentors if the research is related to the broad field of psychological science, but this is subject to the discretion of the Director of Undergraduate Studies. Most faculty research mentors choose to screen potential students via some form of application and/or interview process.

Best Practice: For every one semester hour, a student should spend about 3 hours per week in the lab/field performing research, literature reviews, data analysis, etc. Students may not be assigned only menial laboratory tasks. Faculty research mentors are encouraged to work with students to develop products that can be presented at regional or national scientific conferences, including undergraduate research conferences. Some student projects lead to co-authorship on peer-reviewed publications.

Undergraduate or Honors Research Performed Outside the Department of Psychology

Undergraduate or Honors Research is allowed to be performed outside the Department of Psychology, and this occurs on a regular basis. The process for this to occur is listed below:

- 1) Student identifies a potential research mentor on the UAB campus (or very rarely, at off-campus placements). The research must be related to the broadly defined field of psychological science. Mentors outside of the psychology department must be approved by the Director of Undergraduate Studies.
- 2) Once permission is given to the student by the researcher, the student should contact a psychology department advisor to register for PY398. Students in the Psychology Honors program must obtain approval of the plan from the Director of the Honors Program.
- 3) At the start of the term, students must complete a brief plan for research over the course of the term. That plan must be reviewed and signed by the faculty mentor and then submitted to the psychology department advisors.
- 4) On a weekly basis during the term, the student must complete a log of research-related activities.
- 5) After research has concluded for the term, students should submit their completed log to the faculty research mentor. Mentors are responsible for reviewing the log, signing approval, and assigning a letter grade. The log should then be returned to the psychology department advisor.
- 6) Psychology department advisors will work with the Director of Undergraduate Studies to submit assigned grades to the UAB Registrar.
- 7) For students completing their second of three semesters in the Psychology Honors Program, a formal research proposal including an introduction, proposed methods, proposed analysis plan, and relevant literature citations should be submitted to the professor with whom the student is researching and the Director of the Psychology Honors Program (Dr. Michael Crowe). On most occasions, the student will also complete a verbal proposal of the research in the Honors Program seminar, and the faculty mentor may choose to assist with preparation of that proposal.
- 8) For students completing their third and final semester in the Psychology Honors Program, a formal written report in the form of a scientific paper is required. This should be submitted for approval to the professor with whom the student is researching and to the Director of the Psychology Honors Program (Dr. Michael Crowe). Students are also required to present their research in the Honors Seminar and at a professional meeting (one option to complete the professional meeting requirement is the annual Ost Competition held in the psychology department each spring). Faculty mentors may choose to assist students with preparation of these proposals.

Final Notes

Most freshmen will not qualify to perform undergraduate research for credit. University Honors students who are freshmen may be able to perform research for credit through the University

Honors Program, but should first consult their Psychology Academic Advisor and the Director of the University Honors Program for specific requirements to register. If you are advising a student who might be competitive for a national scholarship (Goldwater, Fulbright, etc) please let us know. *To post an opening for an undergraduate student in your lab, on the Psychology website, contact the Psychology department IT specialist, Aeron Gault, agault@uab.edu.*

If you have any questions, whatsoever, please do not hesitate to call or email the Psychology Department Advisors at 205-934-3850 or redfox@uab.edu or kklyce@uab.edu.