## REQUEST FOR GRADUATE INDEPENDENT STUDY Duke University – Master's of Statistical Science The Graduate School

Independent study enables a student to pursue for course credit individual interests under the supervision of a faculty member.

STA 693: Master's Independent Study: Statistical Science Master's students pursue independent studies to augment or extend work beyond the set curriculum. The Independent Study course allows students to do individual research in a field of special interest under the supervision of a Statistical Science faculty member, resulting in a substantive paper, project, or written report containing significant analysis and interpretation of a previously approved topic. The independent study course STA 693 is a graded (type of study), three-credit course reserved for Master's students. Students can take STA 693 twice and count up to six credits towards their degree as long as the course topic and the content differs each time. Consent of instructor and Master's Program Director required. The course should include content and goals requiring performance appropriate to a 600-level course in Statistical Science.

#### Policies:

- 1. **Approval** The independent study must be approved by the instructor(s) involved as well as by the Master's Program Director.
- 2. Faculty appointment The instructor of record/supervising faculty member must hold a regular rank faculty appointment at Duke within the Department of Statistical Science. Students can be co-advised by a faculty member outside of the Department. In some cases, there may be an additional instructor who mentors the bulk of the independent study and holds an appointment outside the sponsoring department or program. If this is the case, the instructor of record/supervising faculty member is responsible for submitting the final grade, and ensuring that the instructor adheres to academic standards, policies, and procedures pertaining to graduate students in The Graduate School.
- 3. Course Content / Quality The independent study must provide a rigorous academic experience equivalent to that of other graduate-level Duke courses. A student should expect to spend at least 180 hours, including meetings and readings, on the project over the course of the semester for a 3.0-credit independent study. Independent study courses may not duplicate available course offerings in the semester or summer term in which the independent study is being taken, nor may independent study be used simply to provide low-level support for other projects or to observe or shadow the work of others.
- 4. **Meeting schedule** In addition to the individual effort of the student, which normally entails ~12 hours per week, the student will meet with the instructor of the independent study at least once a week.
- 5. **Final product** The student will produce a final academic product to be completed during the semester for which the student is registered for the course. The final product must be submitted to the Master's Program Director (MSS) as a record of the independent study work completed.
- 6. **Grading** The instructor will evaluate the work, including the final product, associated with the independent study and submit a grade by the end of the semester. If the independent study has an instructor in addition to a supervising faculty member, the instructor will consult on the final grade with the supervising faculty member will submit the final grade.
- 7. **Research Integrity**: The supervising faculty member will review the need for research protocols regarding protection of human subjects and/or the use and care of vertebrate animals, in accordance with policies of the Duke Campus IRB, Duke Medical IRB, or Duke Institutional Animal Care and Use Committee. Master's students pursuing an independent study must have previously completed the following RCR requirements: GS 714 and GS 715.
- 8. **No credit for confidential work related to an internship or independent study:** The final academic product of an internship or independent study becomes a part of the department's archives for accreditation. Faculty and staff members will not sign a non-disclosure agreement in connection with the student's work on this independent study.

## **Procedures:**

- Students wishing to register for an independent study must first make arrangements with a faculty member having expertise in the desired area. The student and supervising faculty member (and instructor, if there is one) should agree on the course title, plan of study, objectives, and expectations, as well as on the nature of the final product and evaluation criteria.
- 2. The student will then complete the Registration Form, including a proposal that addresses the required information detailed below. The final document should consist of one pdf including the Permission Form cover sheet, a proposal starting on page 2, and the signature page last.

- 3. After the supervising faculty member is satisfied with the proposal and signs the form, the student submits the complete Independent Study Registration Form (cover sheet, proposal, signature sheet, combined as one pdf document) to the Master's Program Director for final approval before the end of the drop/add period of the term in which the independent study is to be taken.
- 4. The Master's Program Director may require revisions before the form is approved.
- 5. After all signatures are obtained and the form has been approved, Mrs. Whitesell will assign and notify the student of the course, section, and permission numbers, will distribute copies via email to student and supervisor, and will archive the final version for the department in Box.
- 6. The student must then register for the course using those numbers.
- 7. At the end of the semester, the student must deliver the final work product to the instructor and/or supervising faculty member by their agreed upon schedule as well as to the Master's Program Director for archival purposes. The submission must include documentation of fulfilling any RCR requirements, if applicable.

# INDEPENDENT STUDY PERMISSION FORM COVER SHEET Duke University – Department of Statistical Science The Graduate School

To the student: Please read the attached policies and procedures and consult with your instructor / supervising faculty member about course title, description, requirements, and expectations. This form must be approved and signed by the supervising faculty member, the instructor (if different from supervising faculty member) and submitted to the Master's Program Director before the end of the drop/ add period. After all signatures are obtained and the form has been approved, Mrs. Whitesell will assign the course, section, and permission numbers, will distribute copies, and will archive the final version for the department.

Date:			
Student Name:			
E	Email:		
1	Net ID:		
(	Student ID (not unique ID):		
(	Graduation Term and Year:		
F	Program:		
Course: STA 693			
٦	Term and Year:		
٦	Title:		
8	Short Title (max 30 characters) for transcript:		
Instructor of Record/Supervising Faculty Name:			
A	Academic Title:		
A	Affiliation: Statistical Science		
Additional Instructor (if different from Supervising Faculty) Name:			
A	Academic Title:		
A	Affiliation:		

**Protocol number from** Duke Campus IRB, Duke Medical IRB, or Duke Institutional Animal Care and Use Committee, if applicable and brief description of student's role. Please attach pertinent student training documentation if applicable.

This is where your proposal goes. The cover sheet is the first page of your form. Page 2 begins your proposal that addresses each of the following eight information components, clearly identified. If a component is not applicable, say so. Replace this list with your proposal. Add the signature page last. Combine into one pdf document and submit for signatures.

## 1. Prior independent study

If you have taken prior independent study courses at Duke, please provide information on the semester, course number, department, and supervising faculty member/instructor.

## 2. Title and description of proposed study

Provide a one to two paragraph description of the proposed study, including topic, course goals, research / readings to be conducted, and a rationale for independent study as opposed to regular course work.

#### 3. Nature of the final product

Describe the nature and length of the final product (e.g., academic paper, artistic product, research report, etc.).)

## 4. Scheduled meetings and work expectations

Provide information on frequency and length of meetings with instructor, and expected work commitments and/or timetables:

#### 5. Grade to be based on

Provide information on how your work in the course is to be evaluated. Please be explicit. Sample text is provided below.

A-range - Weekly progress met or exceeded expectations at the course level of the independent study without much prompting; student can independently implement methods, correctly interpret, and accurately communicate results; the end product is functional and meets expectations; an accompanying write-up describing the methodology is produced; reproducibility practices have been used and documented so that the work is reproducible. For research independent studies, results are suitable for inclusion in a celebration of graduate research without much revision.

B-range - Weekly progress usually met expectations at the course level of the independent study or required only minor prompting; student is mostly able to independently implement methods and correctly interpret and accurately communicate results, but one or more of those areas does not fully meet the expectations outlined in the proposal; interpretation and communication of results is not fully correct, such that the final product / write-up is somewhat unclear, not quite accurate, or needs further editing. Some attention was paid to reproducibility practices, but their use and documentation was incomplete; the work is probably reproducible. For research independent studies, results might be suitable for inclusion in a celebration of graduate research if some revisions are made.

C-range or lower - Weekly progress often did not meet expectations at the course level of the independent study and/or student missed many meetings and required much prompting; student has not independently implemented methods and correctly interpreted and accurately communicated results; submitted work and progress, even after revisions, does not fully meet the expectations outlined in the proposal; student does not have a good handle on the methodology and is not able to implement it; a poor final product / write-up is produced. The work is not reproducible. For research independent studies, results are not suitable for inclusion in a celebration of graduate research unless major revisions are made.

### 6. Reading list

Provide a list of texts that will be studied over the course of the semester, and/or provide a bibliography of secondary sources related to your research proposal.

### 7. Research sources and methods

Provide a description of the primary sources upon which your research will be based and how those sources will serve your research objectives. Data sources must be clearly described. In addition, please address whether you CURRENTLY have data access. If you do not have access to the data at present, a detailed work-around plan is required (e.g., what will be the final product if data access is not possible). Also briefly discuss approved research protocol, including protocol number, and attach student training documentation, as required by Duke Campus IRB, Duke Medical IRB, or Duke

Institutional Animal Care and Use Committee, if applicable. Identify here the RCR modules to be completed during the semester, if applicable. If other certifications or training are required, please list them as well.

## 8. Resources

Please describe the departmental and university computing resources that will be used in producing the final product of this independent study. Also describe the backup procedures and media that will be used to safeguard the work during the semester.

Signatures:			
Signature of student:			
Date:			
Approval Signatures Please read attached policies and procedures on independent studies before signing.			
Supervising Faculty Member	Additional Instructor (If different from Supervising Faculty Member):		
Name:	Name:		
Signature:	Signature:		
Date:	Date:		
Master's Program Director			
Name:			
Signature:			
Date:			

Complete the form, sign it, and pass it on in pdf form for signatures. The signed form must then be returned to Mrs. Karen Whitesell, the DUS Assistant (karen.whitesell@duke.edu) to obtain the course, section, and permission numbers. Once those numbers are assigned, the DGSA will archive the signed permission document and will distribute copies to the student, supervising faculty member, and instructor (if different from Supervising Faculty Member).

## To be completed by Departmental Administration:

ASSIGNED COURSE AND SECTION NUMBER:

ASSIGNED PERMISSION NUMBER: