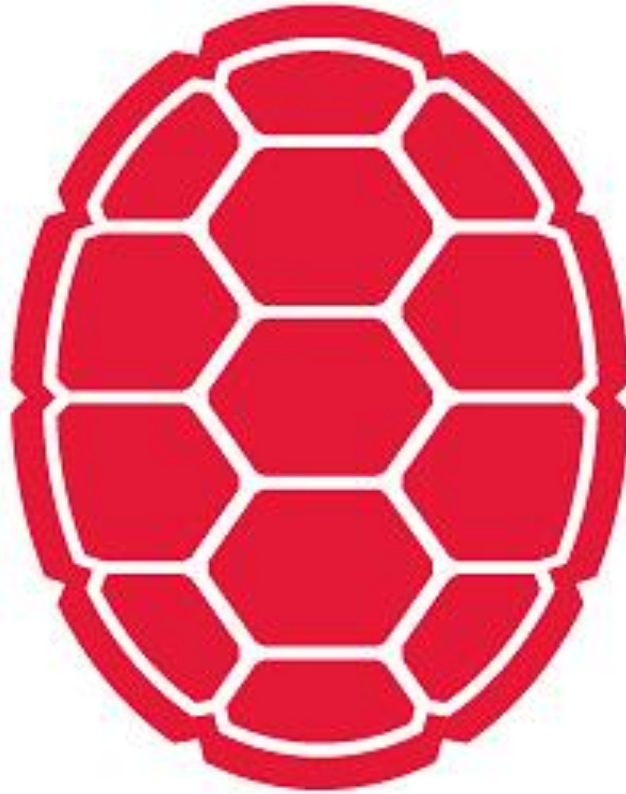


IAA Internship Manual

INAG 288 Internship

INAG 289 Internship Experience & Professional Development



INSTITUTE OF
APPLIED AGRICULTURE

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Message from the Director:

An internship is essential to your career preparation and required for your IAA program. The faculty and I believe there is no substitute for the real world experience you gain during your internship. Your internship supervisor and others you meet during your internship have the potential to become valued mentors and provide strong references for you. For many students, internships lead to job offers.

It is important to remember that your internship is a college course and not just a summer job. Therefore, you must meet the university's registration requirements and deadlines. Your advisor can be a tremendous asset for you during your internship. She/he can assist you in finding an internship and will visit you at your internship site during the summer. Please exchange contact information with your advisor before leaving campus.

While interning this summer, take notes and pictures to document your experience and to aid you in writing your internship report and preparing your oral presentation.

Remember, you are representing the University of Maryland and the Institute of Applied Agriculture. Concentrate on being a leader and the best employee you can be. Ask questions whenever appropriate and learn as much as possible from your employer and fellow employees.

We look forward to seeing you in the fall and hearing all about your experience.

Sincerely,

Glori D. Hyman

IAA Director

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Overview

Students earn a total of four credits for their internship and complete it in two phases:

- INAG 288: Internship (1 credit) is the 320-hours of work experience, along with the daily work log and weekly written assignments used to collect information for the internship report.
- INAG 289: Internship Experience & Professional Development (3 credits) is a fall course completed after the summer work experience is complete. This course consists of the written report on the work experience; the oral presentation; and various professional development assignments to launch your job search when you graduate.

It is the student's responsibility to find and secure an internship before the deadline to submit your Internship Agreement. Your advisor can be a tremendous asset for you in making contacts with potential employers. You should begin contacting potential internship sites as early as December and continue applying in earnest during January and the beginning of the spring semester. Check with your advisor for approval on your internship site **before** accepting the position. Salary and benefits are negotiated between the employer and the intern. Most interns are paid hourly wages, but unpaid internships are acceptable.

A sample letter explaining the IAA internship program is included in Appendix B and students can send this to prospective employers who would like information. Appendix C is the Internship Agreement. Students must submit the signed Internship Agreement to their internship advisor by the last day of classes of the semester or prior to the start of their internship, whichever comes first.

INAG 288: Internship

Course Description

INAG 288: Internship (1 Credit) consists of on-site internship training in the student's major area of study. Students must complete a minimum of 320 documented work hours at an approved work site. Students should complete the on-site portion of their internship during the summer between their first and second years. Grading: Regular. Prerequisite: Advisor's approval. INAG 288 is typically followed in the fall by INAG 289.

Registration

It is important to remember that INAG 288 is not just a summer job, but it is a university course as well. As with all university courses, there are specific registration procedures that must be followed and deadlines that must be met. Failure to register, using an incorrect section number, or late payments can forfeit registration and complicate graduation. Pay careful attention to the following procedures:

- Register for INAG 288 via www.testudo.umd.edu

- Register for **Summer Session II**. Note that there are several summer sessions, so please check the accuracy of your registration. Summer Session II begins in July, and registration for the course opens in March. Keep in mind that your internship starts on the date that you have arranged with your supervisor (usually late May or early June), regardless of the start date of Summer Session II.
- Registration stays open until July; however, register as soon as possible so you do not forget. If you fail to register for INAG 288, you will be unable to earn credit for the internship, even if you complete your work experience. Information regarding summer sessions and deadlines can be found at <http://oes.umd.edu/>
- It is important to register for the section of INAG 288 that corresponds to your internship advisor at the IAA. The appropriate section numbers are:

Section	Internship Advisor
I201	Geoff Rinehart
I202	Meredith Epstein
I203	Ken Ingram
I205	Heather McHale

Please note that each of the section numbers above begins with the capital letter “I” and not the number one.

Course Requirements

- Complete the Internship Search Self-Assessment—due before Spring Break
- Complete the Internship Agreement—due the last day of spring classes
- Complete 320 work hours at internship
- Arrange and conduct an advisor visit at your work site
- Complete the required assignment on ELMS each week (a total of 8)
- Keep your Daily Work Log

Please exchange contact information with your internship advisor before leaving campus for summer break. Your internship advisor will visit you during the summer. A general outline for your internship report is included in this manual. Your advisor may provide additional details to be included in your report. The outline will give you an idea of what records you should maintain and which questions you should ask of your employer and/or supervisor(s). You are to maintain a Daily Work Log during your internship, take pictures of workplace activities, and collect key documents (with the explicit permission of your supervisor) for use in your written report and presentation for INAG 289. Please request permission from your employer before taking and posting photographs, as some internship positions may have confidentiality concerns.

It is important for you to be a good employee and a good intern. Make sure to adhere to company policies regarding uniforms, tardiness, leaves of absence, safety, etc. Good interns are

inquisitive, hardworking, and eager to learn. Remember, you are representing the University of Maryland and the IAA. Your attitude and job performance will leave lasting impressions on your employer.

Grading

Students must meet the expectations set by their internship advisor and their employer. In order to earn a passing grade for INAG 288, students must complete a minimum of 320 work hours. The final grade for INAG 288 is based on a total of 200 points. Grades are determined according to the following scale:

100-97: A+	87-89.9: B+	77-79.9: C+	67-69.9: D+	59.9 & below: F
93-96.9: A	83-86.9: B	73-76.9: C	63-66.9: D	
90-92.9: A-	80-82.9: B-	70-72.9: C-	60-62.9: D-	

Category	Points	Value
Internship Search Self-Assessment	10	5%
Internship Agreement (submitted by last day of spring classes)	20	10%
8 weekly assignments on Canvas	80 (10 points each)	40%
Site visit and performance evaluation by internship advisor and employer	50	25%
Entries in Daily Work Log	40	20%

Frequently Asked Questions

Do I have to pay tuition for my internship?

Yes. Your internship is a course for which you will receive a grade. For your internship to be recorded as part of your official University of Maryland transcript, you must register for INAG 288 and pay tuition and fees. Many campus fees are waived because you are not taking a course on campus.

Can I accept an unpaid Internship?

Yes. While most students opt for a paid-internship, you are welcome to complete an unpaid internship as long as you will still be completing 320 hours of work. If you do secure an unpaid internship, the Bright Futures Initiative awards students with need-based scholarships ranging from \$100-\$1,000 to help offset expenses incurred during unpaid internships with non-profit organizations and government agencies. For details and application go to

go.umd.edu/brightfutures. Applications are typically accepted beginning April 1, so you must have your internship lined up by then.

What if the job is not what I expected?

Reference your signed internship agreement first. Then, communicate with your internship advisor and supervisor as soon as possible. It may be possible to change your job description or find another employer.

What happens if I get fired?

Hopefully this will not happen, but if it does, you should contact your internship advisor immediately. You will receive an “F” in INAG 288 for this internship and will need to complete another internship before you can take INAG 289 and earn your Certificate in Applied Agriculture from the University of Maryland.

Weekly Internship Assignments

To help you capture the data and information you will need to complete significant portions of your written report for INAG 288, your internship advisor will post 8 weekly assignments throughout the summer. The assignment topics will address some of the following areas:

1. Business mission and goals
2. Organizational structure (chart)
3. Marketing
4. Profitability
5. Pest control
6. Equipment/resource inventory (log)
7. Nutrient or nutrition management
8. Plant or animal care/Customer or client service
9. Sustainability and corporate responsibility

Samples of assignment questions you may be asked to complete are included here.

1. Create a table of practices, chemicals, and other agents used to control insects, weeds, and/or diseases at your facility. Indicate the following:
 - Whether the substance is preventive or reactive
 - Whether it is a chemical, biological, physical, or cultural control
 - Application method, rate, and frequency
 - Which conditions the substance or practice treats
 - Safety protocol employed when handling the substance
2. Create a table of amendments and fertilizers (for crop, turf, and/or ornamental production and maintenance) and/or a table of feed or ration preparations (for livestock, pets, and/or laboratory animals), including commercial names, application

rates or quantities, chemical or nutritional analysis, and supplier information for each item. Explain how these materials are used at your organization within an overarching plan or system.

3. Please answer the following questions about your employer.
 - What is its legal form of organization?
 - Give a brief history of the organization?
 - What are the principal products and/or services offered by the organization?
 - What are the short-term and long-term goals of the organization?
 - What are the organization's primary sources of income?
 - What was the organization's annual revenue last year?
 - Summarize the sustainability and/or corporate social responsibility philosophy of the organization.
 - What values for sustainability and/or corporate social responsibility does the organization articulate in its policies, production practices, and/or marketing materials? Give one example of this in action.

4. Draw an organizational chart of the entire organization (or your department/work team, if the organization is very large). List the job titles of each employee, noting how many employees hold each title. For each title, indicate the specific job responsibilities.

5. Please consider the organization's financial status.
 - How does this business make money? (Pricing, cost for CSA share, contract values, dues or green fees for golf clubs, number of customers, number of rounds of golf, office visit cost for a vet, etc.)
 - What period of time is used as an accounting year?
 - What financial statements/records are prepared for the organization? Please include examples of each.
 - How are the aforementioned financial statements/records used? When are they used? By whom?

Daily Work Log

You are required to maintain a **Daily Work Log** throughout your internship via the online form at go.umd.edu/worklog. Handwritten notes in a daily planner may be used to track hours and activities throughout the week, but must be added to the online form each week. The online form provides evidence of completion of 320 work hours.

Record the following information for each day that you work at your internship:

- A. Date
- B. Number of hours worked
- C. Significant activities
- D. Observations – examples of content include:

- a. New responsibilities you have been given; how you performed your new responsibilities
- b. Ideas you would implement to improve the efficiency or effectiveness of the operation
- c. Problems that arose and how you/other employees dealt with them
- d. Experiences or observations related to leadership
- E. Your overall perception of the operation

You may complete the form one-day-at-a-time (e.g. input Monday's data on Monday night, Tuesday's data on Tuesday night, etc.), or multiple-days-at-a-time (input data for Monday-Friday on Friday night). You are expected to complete all entries for the days worked in a given week by 11:59 p.m. on the Friday of that week.

The data you provide will be automatically aggregated into a spreadsheet at the end of Summer Session II. Your internship advisor will email you that spreadsheet. Your task will be to include it as Appendix C in your internship report for INAG 289.

Intern Performance Appraisal

You are responsible for arranging for your internship advisor to visit with you and your supervisor at your work site. This visit should take place midway in your internship. During that visit, your internship advisor will check in with your supervisor to see how things are going.

Your supervisor may be asked to comment on the following work aspects:

- Attitude toward learning, taking on tasks of all kinds, and in general
- Confidence and proficiency demonstrated in communicating with others: listening, speaking and writing
- Completing assignments in a consistent, timely, satisfactory manner
- Initiative shown by sharing ideas, resolving problems and taking action
- Working relationship with other employees; teamwork
- Respect demonstrated toward the diversity and contribution of others
- Punctuality and work ethic

At the end of your internship, your employer will complete a formal Performance Appraisal via an online form (see Appendix D). Your employer's responses will go to your internship advisor, who will use the feedback in determining your final grade. While your internship advisor may not share direct comments with you, s/he will use your employer's feedback to help prepare you for success in your career.

INAG 289: Internship Experience and Professional Development

Course Description

INAG 289: Internship Experience & Professional Development (3 Credits) builds on your work experience in INAG 288, and it is generally completed in the fall semester immediately following your internship. Students must complete and submit a comprehensive report on the activity and management of the work site used in INAG 288: Internship. Grading: Regular. Prerequisites: Advisor's approval and INAG 288: Internship.

Course Requirements

Students are required to maintain a **Daily Work Log** during their internship (INAG 288) via the online form available at go.umd.edu/worklog. The data from your daily entries will be aggregated into a spreadsheet that you must request from your internship advisor at the end of Summer Session II or beginning of the fall semester. This spreadsheet must be included as Appendix C in your internship report for INAG 289.

The key elements of INAG 289: Internship Experience & Professional Development are the internship report; the internship presentation; and assignments related to professional development that include but are not limited to creating a resume and LinkedIn profile, interviewing, and networking.

Internship Report Details

Two outlines are included in this manual: one for students in Agricultural Business Management, Sustainable Agriculture, Agricultural Leadership and Communication, Ornamental Horticulture, Landscape Management, or Turfgrass Management, and one for students in Golf Course Management or Sports Turf Management.

Please note that this outline is a general guide for preparing your internship report and it represents detailed aspects that could be covered in your report. Your internship advisor may require different sections or delete some sections based on your internship experience. The more detail that you can provide related to your internship, the better. So, don't limit yourself to the information covered in this outline. You are required to include sections I, II, and XVII. In general, you will have to add 7-10 other sections.

The report itself **MUST** be **TYPED** and submitted electronically as requested by your advisor. You are strongly encouraged to incorporate illustrations, maps, diagrams, tables, and photographs to support your report. Embed photos into your report as needed to explain or emphasize particular points and to illustrate special projects in which you were involved. Additional supporting materials, samples of work, letters, etc. that demonstrate aspects of your internship or your performance should be included in the appendix, along with your Daily Work Log Spreadsheet.

Your advisor will show you examples of exemplary reports from previous students to use as guides. Certain records in your internship report can serve as valuable references for you after graduation.

General Report Outline

TITLE PAGE

Includes your name, major, date, and name of business where you interned.

TABLE OF CONTENTS

REPORT

- I. INTRODUCTION
 - a. Name of business/enterprise for which you worked
 - b. Address of business
 - c. Name of manager/supervisor to whom you reported
 - d. Telephone number of manager/supervisor

- II. BUSINESS DESCRIPTION

Hint: Perhaps the best way to learn about some of the information covered in this outline is to schedule a meeting with your supervisor to discuss these points. Please note that any business information in this report will not be shared with anyone else. It is important that you learn as much as possible about the business, so please assure your supervisor that the information in this report will not be made public. In addition, please refrain from discussing any business details of your work site with anyone except your advisor. If, for any reason, your supervisor will not divulge the information included in this outline, note it in your report, and give your best estimates. Please note that occasionally advisors may request to use student reports as exemplary examples. If such is the case with your report, the advisor will request permission first.

- a. Type of ownership
 - i. Sole proprietorship
 - ii. Partnership
 - iii. Closed corporation (privately/family owned)
 - iv. Open corporation (publicly owned shares)
 - v. Cooperative
 - vi. Other
- b. History of the business
 - i. How the business got started
 - ii. Progress/changes over time
 - iii. Present status of the business
- c. Major function of the business
 - i. Goods provided
 - ii. Services offered

- d. Sources of income
 - i. Source/enterprise from which income is derived
 - ii. Estimated revenue of products/goods and services to be sold annually
 - iii. **Graphically present** sources of income information requested above
- e. Future pursuits planned for the business
 - i. Short-term goals
 - ii. Long-term goals
- III. BUSINESS ORGANIZATION
 - a. Draw an organizational chart and produce a list of job titles for employees in the business, noting the number of employees for each job
 - b. For each of the titles, indicate the responsibilities of the employees in these jobs
 - c. If the business is a branch or division of a large corporation or government agency, include some information on the corporate structure, website, etc.
- IV. LEADERSHIP AND COMMUNICATION
 - a. Describe internal communication practices (pros and cons)
 - b. Describe the leadership style of the organization or department (pros and cons)
 - c. How are leadership and good communication encouraged, developed, and recognized within the organization? Provide any recommendations you may have for improvement.
 - d. Provide examples of effective leadership observed on the job.
- V. TAXES/PERMITS
 - a. Taxes paid by the business
 - b. Kinds of payroll taxes paid by the business for each employee
 - c. Property taxes paid by the business
 - d. Licenses/permits involved in the operation of the business (this may include sales permits, pesticide applicators' licenses, special use permits, etc.)
- VI. FINANCIAL SUPPORT AND RECORDS
 - a. Period of time used as fiscal year
 - b. List the financial statements prepared by the business
 - c. How are financial statements/records used?
 - d. Do the summary records show profit/loss for each aspect of the business?
 - e. If the business is a corporation, how do the records of this facility contribute to the consolidated annual reports?
 - f. Methods of financing (lending institutions, sales of stocks, etc.)
 - g. Inventory control (if applicable)—scheduling, ordering, and delivering materials
 - h. If records, in your estimate, could be improved, discuss how they should be set up. **INCLUDE SPECIFICS!**
 - i. **If actual records are unavailable, list and show examples of what should be kept, such as spreadsheets for budgets and cash flow for the business. If you must use hypothetical information, please try to make it as realistic as possible.**

- VII. INSURANCE COVERAGE
 - a. Policies carried
 - b. Provisions for liability protection
 - c. If no coverage exists, indicate what, in your estimation, SHOULD be carried
- VIII. LABOR MANAGEMENT
 - a. Source of employees and how they are recruited
 - b. Describe the orientation and training process
 - c. Performance appraisals
 - i. How often
 - ii. How is it done (one-on-one with supervisor, etc.)
 - iii. How the company deals with unsatisfactory performance
 - d. Promotion policies
 - e. Training programs for new employees
 - f. Non-wage benefits offered to employees
 - g. Strengths and weaknesses of current labor management program
 - h. Evaluate and discuss the management style of your supervisor(s). Was it effective? Why or why not?
- IX. MARKETING
 - a. Describe the target market
 - i. Who is the end user of the product or service?
 - ii. What is the size and/or geographical reach of the market?
 - iii. Describe how the market was identified (primary or secondary research, government agencies, local cooperatives, consultants, competitive analysis, etc.)
 - b. Describe the marketing mix
 - i. Product: provide a detailed list of the products and/or services offered
 - 1. Describe seasonality of products/services
 - 2. Describe any processing or value-added elements
 - 3. Describe grading systems, if appropriate
 - ii. Price: include a list of chart of the prices and/or pricing systems associated with each product/service
 - iii. Place: identify when, where, and how products/services are distributed to the target market
 - 1. Describe any contracts used, if applicable
 - 2. Describe the role of cooperatives or syndicates, if applicable
 - iv. Promotion: describe advertising, personal selling, and sales promotion activities used
- X. NUTRIENT MANAGEMENT PLAN
 - a. How the plan was established
 - b. Information included
 - c. Discuss how plan works

- d. Table of fertilizer(s) used, including Commercial Name and Analysis
- XI. INSECT, DISEASE, AND WEED CONTROL PRACTICES
 - a. Indicate whether the substance or practice is preventive or reactive and whether it is chemical, biological, physical, or cultural control.
 - b. Describe the application method, rate, and delivery
 - c. Describe the conditions that the substance or practice treats
 - d. Describe the safety protocol employed when handling substances
- XII. IRRIGATION PROGRAMS
 - a. Outline the company's overall philosophy regarding irrigation and describe irrigation equipment used
 - b. Set up a table showing the type of irrigation, the type of plants, source of water, amount of water consumption per hour, and advantages and disadvantages of this type of irrigation
 - c. If you had no experience in irrigation programs at your internship, briefly discuss what you would see as the best approach to irrigation for most of the projects you worked on
- XIII. FERTILIZATION AND SOIL AMENDMENT PROGRAMS
 - a. Describe new landscape project fertilization or soil amendment programs
 - b. Describe considerations for soil fertility or soil amendment
 - c. Define any tools you used or should use if you had responsibility in this area (e.g. soil probes, soil tests, spreaders, etc.)
 - d. Set up a table of the types of fertilizers or soil amendments used, the plant materials being fertilized, and any notes or comments about the fertilizer (e.g. if you were using bone meal, your comment might be that it's dusty and one would need to wear a mask when handling it)
- XIV. PLANT OR ANIMAL CARE
 - a. If you had responsibility for plant maintenance or animal care, describe it
 - b. Discuss the schedule
 - c. Describe the techniques you used
- XV. ANIMAL IDENTIFICATION AND PROCEDURES
 - a. Animal inventory: identification and classification of each type of animal. You may put this information in a spreadsheet or chart
 - b. Individual and complex space use. How does this compare to recommended space and environmental requirements?
 - c. Daily visual and non-visual health inspection protocols and record keeping
 - d. Nutritional/diet requirements with individual ration recommendations
 - i. Ration preparations
 - ii. Ration evaluation
 - iii. Feed balancing and evaluations
 - iv. Feed supply and supplier information
 - e. Veterinary care

- i. Identification methods
 - ii. Examination and diagnostic testing
 - iii. Quarantine procedures
 - iv. Preventive medicine
 - v. Capture, restraint, and immobilization
 - vi. Management of diseases, disorders, injuries, and/or isolation
 - f. Reproduction
 - i. Pregnancy and parturition
 - ii. Birthing facilities
 - iii. Contraception
 - iv. Pre and post care
 - g. Behavior management
 - i. Animal training & calendar
 - ii. Environmental enrichment
 - iii. Staff and animal interactions
 - iv. Staff skills and training
 - v. Individual exercise program
 - h. Animal programs/policy
 - i. Animal care and use policy
 - ii. Plan evaluation
 - iii. Health standards
- XVI. SUSTAINABILITY AND CORPORATE RESPONSIBILITY
- a. Summarize the sustainability and/or corporate social responsibility philosophy of the company
 - b. Does the company articulate a value for sustainability and/or corporate social responsibility in its marketing materials and/or policies? Why?
 - c. Provide examples of sustainability and/or corporate social responsibility practices observed during the internship. Discuss any environmental conservation programs the employer participates in such as the Audubon Cooperative Sanctuary Program, waste reduction or recycling programs, bird or wildlife habitat, water conservation, etc.
 - d. What recommendations do you have for the company to improve in these areas?
- XVII. ANALYSIS AND SUMMARY
- a. Summarize and analyze your internship: your work, environment, and learning experience
 - b. Explain the most valuable part of your internship experience
 - c. Discuss the reality of the experience and how it differed from or met your expectations

- d. Relate your IAA course work to your internship. Did the internship highlight any academic preparation, skills, abilities, or specific certifications you should acquire?
- e. Explain how the internship increased your knowledge of the industry and how it either reinforced or changed your career goals.
- f. Discuss any new perspectives you gained because of this experience. This section should also include multicultural experiences you had and opportunities to interact with people of different ages, traditions, genders, etc.
- g. Elaborate on the benefits or personal growth you realized from the internship.

INTERNSHIP APPENDICES

Appendix A. MACHINERY

- A. Using a **spreadsheet, provide an inventory** of the **major** machinery/equipment used
- B. Short description (e.g., John Deere front end loader model # 410A w/3500 hours)
- C. Approximate value of each item on the inventory
- D. Maintenance schedule for each of the items on the machinery/equipment inventory
- E. Method of depreciation
- F. Indicate whether the machine is Owned, Leased, Rented, Borrowed, etc.

Appendix B. LAYOUT OF THE OPERATION - MAP OR DIAGRAM

- A. Location of storage areas/barns, etc.
- B. Rationale for layout of operation
- C. Description of operation space and any specifications for the areas
- D. Any ideas you have for improvement to the layout

Appendix C. DAILY WORK LOG SPREADSHEET via the online form at go.umd.edu/worklog. The data you provide will be automatically aggregated into a spreadsheet at the end of Summer Session II and emailed to you by your advisor. Your task will be to include that spreadsheet as Appendix C in your internship report for INAG 299B.

- A. Date
- B. Number of hours worked
- C. Significant activities
- D. Observations – examples of content include:
 - a. New responsibilities you have been given; how you performed your new responsibilities
 - b. Ideas you would implement to improve the efficiency or effectiveness of the operation
 - c. Problems that arose and how you/other employees dealt with them
 - d. Experiences or observations related to leadership
 - e. Your overall perception of the operation

Optional Appendices. Any supplemental materials. May include newsletters or articles, letters of appreciation, samples of work you created on the job, etc.

Golf Course or Sports Turf Management Report Outline

This form will not provide enough space for satisfactory answers to many of the questions and problems listed. It is, therefore, suggested that it be used only as an outline to provide a basis for obtaining the kind of information which should be included in this report. Other information about your summer's work which is not included in answers to the required questions but which you feel are important should be included at the end of the report. The use of photographs, maps, drawings, and tables to aid in the presentation of your data is strongly recommended. Include as many details as necessary to make the report clear and concise. The work YOU put into this report will aid YOU in the future.

- I. INTRODUCTION (10 pts)
 - a. Name of club
 - b. Address
 - c. Name of Golf Course Superintendent
 - d. Name of Assistant Golf Course Superintendent
 - e. Name of Course Professional
 - f. Name of Golf Course Architect for original design
 - i. Date course constructed
 - ii. Architect and dates for subsequent redesigns or additions
 - g. History of course
 - i. Why was the course constructed?
 - ii. Have there been any major tournaments hosted by the club?
- II. BUSINESS DESCRIPTION (20 points)

Hint: Perhaps the best way to learn about some of the information covered in this outline is to schedule a meeting with your supervisor to discuss these points. Please note that any business information in this report will not be shared with anyone else. It is important that you learn as much as possible about the BUSINESS and managing, so please assure your supervisor that the information in this report will not be made public in any way. In addition, please refrain from discussing any business details of your work site with anyone except your instructor. If, for any reason, your supervisor will not divulge the information included in this outline, note it in your report, and give your best estimates.

- a. Type of ownership
 - i. Proprietorship
 - ii. Partnership
 - iii. Closed corporation (privately/family owned)
 - iv. Open corporation (publicly owned shares)
 - v. Cooperative
 - vi. Municipal
 - vii. Other

- b. Operating Budget for Maintenance Operations and Capital Budget
 - i. What is the current operating budget for your facility? What are the three largest line items for the maintenance operating budget? Has the operating budget increased or decreased from the previous year and what was the percent change of the operating budget from the last year?
 - ii. What is the current capital improvement or capital budget and what will this budget cover with regards to equipment replacement or facility improvement?
 - iii. What is the estimated revenue of the facility?
- III. BUSINESS ORGANIZATION (10 pts)
 - a. Draw an organizational chart and produce a list of job titles for employees in the business and number of employees for each job.
 - b. For each of the titles, indicate the responsibilities for the employees in those jobs or do they have job descriptions for each of the job titles?
 - c. What licenses/permits are needed for your superintendent in order to do their job effectively?
- IV. LEADERSHIP AND COMMUNICATION (15 points)
 - a. Describe communication that your superintendent uses for your staff and also for the membership or ownership groups of the course.
 - b. Describe the leadership style of the organization or department (pros and cons).
 - c. How is leadership and good communication encouraged, developed, and recognized within the organization? Provide any recommendations you may have for improvement.
 - d. Provide examples of effective leadership observed on the job.
- V. FINANCIAL SUPPORT AND RECORDS (5 pts)
 - a. What is the period of time used as the fiscal year?
 - b. What financial statements are prepared for the superintendent such as an income statement or a balance sheet? How are these statements used?
- VI. LABOR MANAGEMENT (10 pts)
 - a. How are employees recruited and is there an orientation or training program for new hires?
 - b. Are there performance appraisals and
 - i. How often?
 - ii. How is it done (one-on-one with supervisor, etc.)?
 - iii. How does the company deal with unsatisfactory performance?
 - c. Describe any strengths and weaknesses of current labor management program.
 - d. Discuss weekend work schedules and rain day work policies.
- VII. GENERAL DESCRIPTION OF GOLF COURSE (40 pts)
 - a. Physical features of the course
 - i. Soil series ([Web Soil Survey](#)) for the fairways and roughs

- ii. Type of soil for greens and tees if they have been modified with sand; describe the type of sand and the percentages of sand found in greens and tees
 - iii. Type of turfgrasses present (species and cultivars) on the different playing surfaces
 - iv. Course topography
 - v. Any drainage problems
 - b. Greens
 - i. Describe air and water (surface and subsurface) drainage
 - ii. Indicate if green is flat, rolling, elevated, and/or depressed
 - iii. Exposure (shade vs full sun)
 - iv. Determine area of each green
 - c. Fairways
 - i. Determine the area of each fairway
 - d. Tees
 - i. Are there multiple tees? If so, how many per hole, and how do they affect play?
 - ii. Are there any unusual teeing areas? If so, explain
 - iii. Determine the area of tees
 - e. Roughs
 - i. Are intermediate roughs used?
 - ii. How do roughs affect play?
 - iii. What is the area of roughs?
 - f. Bunkers
 - i. How many bunkers are on each hole?
 - ii. How many square feet of bunkers do you have?
 - g. Ornaments
 - i. Describe how ornaments and trees affect play and the aesthetic value of the course
 - ii. If course is heavily wooded, indicate the principal tree species
 - h. Course Rating
 - i. Par for each hole
 - ii. Yardage of each hole
 - iii. Total yardage of golf course
 - iv. Slope rating
- VIII. SUMMARY TABLE FOR GOLF COURSE (5 pts)
 Include the following in a summary table:
 - a. Total land on course
 - b. Total fairway area
 - c. Total green area

- d. Total rough area
 - e. Total tee area
 - f. Total area for club house, parking, and grounds
 - g. Total wooded area
 - h. Total area of bunkers
- IX. SUMMARY TABLE FOR OTHER RECREATIONAL FACILITIES (5 pts)
- a. Indicate whether other facilities are available and their approximate number and area.
 - b. Indicate who is responsible for maintenance of these areas.
- X. MAINTENANCE OPERATIONS
- a. Describe the present fertilizations and liming program for tees, fairways, and greens. If there is none, list the reasons why. Are soil tests performed, and if so, how frequently? Be specific on *treatment dates* and *rates* (lbs N/M).
 - b. Describe the present topdressing program for greens. If there is none, list the reasons why.
 - c. Describe the present irrigation program (hand watering to controller programming) and soil moisture monitoring used for greens, tees, and fairways. If there is none, list the reasons why.
 - d. Describe the seriousness of weed problems on the course (greens, tees, fairways, roughs, and sand traps) and what was done to control them. Be specific for treatment dates and rates. If there is no program of control, list the reasons why.
 - e. Describe the seriousness of insect damage on the course (greens, tees, fairways, roughs, and sand traps) and what was done to control them. Be specific for treatment dates and rates. If there is no problem of control, list the reasons why.
 - f. Describe the seriousness of turfgrass diseases on the course and what was done to control them. Be specific for treatment dates and rates. If there is no problem of control, list the reasons why.
 - g. What is the height of cut of greens, tees, fairways, and roughs throughout the season? Does this change from month to month? If so, how? What is the mowing frequency for each area?
 - h. Describe the movement of tee markers on an average tee. How long are worn spots given a chance to recover? Are tees renovated or repaired during the season?
 - i. Map out one green on the course and record the way the cup is rotated throughout the season. How often is the cup changed? How long can any one of the cup scars be recognized?
 - j. List any other maintenance practices performed to ensure quality trees, fairways, and greens. For example: overseeding, triplex mowing of fairways, use of fans, etc.
- XI. EQUIPMENT (20 pts)

- a. Provide a table that gives the following information about each piece of equipment used on the course, as shown. Be sure to indicate total cost of the equipment.

Equipment Name	Manufacturer	Replacement Cost	Purchase Cost	Purchase Date	Anticipated Life Expectancy

Total Cost: \$ _____

- b. What equipment is leased, rented, or borrowed?
- c. Is there a preventive maintenance program for all equipment? If so, briefly explain.
- d. Select the best and worst piece of equipment and explain why.
- XII. IRRIGATION SYSTEM (10 pts)
- a. What type of irrigation system is present (include manufacturer)?
- b. Briefly describe the number of heads that are on an individual green, tee, and fairway. Describe their spacing (triangular or square) and how many total heads are present for the entire system
- c. Describe the maximum flow rate (gpm) for your irrigation system and how many heads are running at the same time
- d. What is the sprinkler pressure requirement and what is the pressure at the pump house when the system is running?
- e. What size pipe is present at the pump house? Track water from your pump house to your 18th hole and describe the pipe size and sprinkler placement for this hole. Use Google Earth to get a map of your 18th fairway.
- XIII. MAP OF COURSE (10 pts)
- a. Obtain a map of the course from the superintendent or from Google Earth and submit a map of the course.
- b. Identify the most interesting hole (tee to green). Explain why you believe it is the most interesting hole and show an enlarged photo of the hole using Google Earth.
- c. What is the elevation and elevation change from the highest point on the golf course to the lowest point and what is the pump house elevation?
- XIV. GENERAL MANAGEMENT PROBLEMS (20 pts)
- a. List all the features of the course which would help in making it reasonable to maintain
- b. List all features of the course which would help in making it difficult to maintain
- c. Method of buying supplies and equipment
- d. Describe the current system of record keeping. Include any forms that assist in this process. Is a computer used for budgetary and record keeping purposes?

- e. Number of golf carts and rules governing their use. Describe any maintenance problems that have been caused by their use. What has been done to correct these problems? Who received the income from the golf carts (pro, club, or split between)? Who maintains carts and who tows in those that break down on the course?
- f. Conduct a time management study for your course. For greens, tees, and fairways, describe:
 - i. Different types of activity performed
 - ii. Type of equipment
 - iii. Area (square footage or acreage)
 - iv. Frequency of maintenance activity

At the end of this outline, see the sample time management study.

- g. Photos of turf related problems can enhance your presentation.

XV. ANALYSIS AND SUMMARY (10 pts)

- a. Summarize and analyze your internship: your work, environment, and learning experience
- b. Explain the most valuable part of your work experience
- c. Discuss the reality of the experience and how it differed from or met your expectations
- d. Relate your IAA course work to your internship. Did the internship highlight any academic preparation, skills, abilities, or specific certifications you should acquire?
- e. Explain how the internship increased your knowledge of the industry and how it either reinforced or changed your career goals.

XVI. DAILY JOURNAL AND BLOGS (30 pts)

- a. Maintain a daily log of activities performed on the golf course. Note weather conditions, pest occurrences, and other timely events. Report this on the blog on a weekly basis.

Reports handed in late will be affected in the following way:

1. Reports submitted two weeks late : loss of 20 pts
2. Reports submitted four weeks late: loss of 40 pts

Note: Total Points is 270 points for this report

Updated 1971, by Dr. Douglas Hawes; from Iowa State Mimeo

Further revised February 1973 and 1975 by Dr. Hawes

Further revised in 1984, 1989, 1992, 1996, 2011, and 2015 by Dr. Kevin Mathias

Time Management Study for Greens (SAMPLE)

Conducted June 1 through October 1

Job Description	Frequency	Method
Mow Greens	Daily to 6 x /Week	Timed with watch
Aerify Greens	2 times	Time Sheets
Needle Tine Greens	6 times	Timed with watch
Fertilize Greens	12 times	Timed with watch
Spray Greens	16 times	Timed Sheets
Topdress	6 times	Timed with watch
Hand Water	20 times	Time Sheets

Task	Hours/Operation	May	Jun	July	Aug	Sept	Oct	Total
Mow Greens	10	300	300	300	300	300	260	1760
Aerify Greens	60	60				60		120
Needle Tine Greens	16	16	32	32	16			

Appendix A: Internship Search Self-Assessment

Internship Search Self-Assessment

Your internship is a key component of your hands-on education. It provides you with solid, resume-building professional experiences; helps you develop new skills; gives you insights into potential careers; and builds your professional networks.

To help you narrow your internship search and determine the best fit for you, please complete this internship search self-assessment. As you complete this guide, be honest with yourself, but remain open to possibilities. You will share this completed sheet with your academic advisor and use it to help discuss the internship goals that you and your internship supervisor will eventually agree upon.

Due: before Spring Break

Submission: email it to your academic advisor

Points: 10 (applied toward your grade in INAG 288)

Internship Goals	
<p style="text-align: center;">Technical (Hard) Skills</p> <p style="text-align: center;"><i>Be specific as to what skills you hope to learn or hone. For example: operate or use certain equipment or software; apply fertilizers or pesticides; promote via social media; budget using a spreadsheet; identify diseases or insect problems; manage irrigation; design something using drone technology, etc.</i></p> <p style="text-align: center;"><i>What hard skills do you want to attain or develop?</i></p>	
<p style="text-align: center;">Interpersonal (Soft) Skills</p> <p style="text-align: center;"><i>Improving your communication skills and professionalism is just as important as developing technical skills. You can accomplish this by showing up on time every day, managing a project, training someone, handling face-to-face sales, working with customers, giving a presentation, writing an article or blog post, completing a report or maintaining appropriate records.</i></p> <p style="text-align: center;"><i>What soft skills do you hope to develop?</i></p>	
<p style="text-align: center;">Background Knowledge</p> <p style="text-align: center;"><i>We recommend that interns gain substantial knowledge about their particular industry and how businesses or nonprofits operate. Consider the</i></p>	

<p><i>variables that go into an operation: different employee functions, roles of teams/crews, how the business generates income, and drivers of success.</i></p> <p><i>What background knowledge do you hope to gain?</i></p>	
<p align="center">Professional Connections</p> <p><i>Internships are the ideal time to begin creating your professional networks, building relationships, and finding industry mentors. Your networks can include other students, entrepreneurs, technical specialists, etc.</i></p> <p><i>What professional connections do you hope to make?</i></p>	
<p>Internship Considerations</p>	
<p align="center">Industry</p> <p><i>Golf course, landscape company, research lab, veterinarian office, equine facility, organic farm, farmers market, nursery, seed company, etc.</i></p>	
<p align="center">Geographic Location</p> <p><i>Where will you be living this summer? Do you have transportation? Are you willing to live in another location? Will you need to have housing provided? What other practical considerations are important to you?</i></p>	
<p align="center">Work Setting</p> <p><i>Do you want to work outside most of the time or indoors? Do you prefer an office type setting? Are you willing to travel to various locations or drive to different sites?</i></p>	
<p align="center">Work Style</p> <p><i>Do you prefer to work as part of a team or independently? Do you prefer to have a set list of chores to follow each day, or determine what needs to be done on your own? Do you like to show up early to organize your thoughts and work, or do you prefer to just walk in and go?</i></p>	

Appendix B: Sample Letter to Employer

Date

Supervisor/Superintendent

Company Name

Company Address

Dear _____:

Thank you for offering me an internship with _____ (name of business)_____. The Institute of Applied Agriculture (IAA) at the University of Maryland, College Park, MD has been teaming with employers for over 50 years to provide meaningful internships for students. Please feel free to review the IAA's academic programs at www.iaa.umd.edu.

The objectives of IAA's internship program are for the students to:

- Experience hands on work in real world situations with trained professionals
- Apply classroom training in the workplace
- Develop leadership skills and experience
- Operate equipment involved with the business
- Learn as much as possible about all phases of the operation

Ideal internships incorporate job rotations that expose students to various facets of the business operation.

The IAA internship program includes two courses. *INAG 288: Internship* requires a minimum of 320 hours of supervised work experience. Students are required to keep a Daily Work Log and are encouraged to take pictures and ask questions when appropriate. *INAG 289: Internship Experience and Professional Development* requires a written report, and an oral presentation summarizing their internship experience. Employers are expected to provide experiential learning opportunities, opportunities to shadow company leaders, as well as regular feedback to students. An internship agreement outlines the responsibilities of both students and employers and is attached for your consideration.

At some point during my internship, I will schedule a time for my university internship advisor to visit with you and me to talk about my experience and performance. In addition, at the end of my internship, you will be asked to complete an online performance appraisal of my work.

Again, thank you for this internship opportunity. If I can provide any additional information, please feel free to contact me.

Sincerely,

Student name

Major

Phone

Email

Appendix C: Internship Agreement

Internship Agreement

Student: Please download this document from the IAA website <http://www.iaa.umd.edu/current-students>. Complete this document in consultation with your advisor and supervisor. When all have agreed on the content and all revisions of this document, you should type a final copy for signatures and distribution to all parties (student, advisor and supervisor) by the last day of spring classes.

PART I

Student Name _____ UID _____
Concentration: _____ Internship Date: _____
Address: _____
Phone: _____ Email: _____

PART II

Internship Organization: _____
Work Address: _____
Supervisor Name & Title : _____
Phone: _____ Email: _____

PART III

A. Job Description:

Describe your role and responsibilities while on your internship. List duties, projects, and any anticipated leadership opportunities (leading a team or project, etc.)

-
-
-

B. Dates & Hours:

You are encouraged to set regular work hours. In order to receive academic credit and a satisfactory grade, you must complete 320 work hours. Please list your start and end dates and anticipated work hours.

C. Supervision:

Describe the supervision to be provided. What kind of instruction or assistance will you receive?

-
-
-

PART IV: Learning Objectives

What do you intend to learn through this experience? List 3-5 abilities, skills, or competencies you plan to develop or enhance.

-
-
-
-
-

Explain the leadership shadowing opportunities that will be made available by the employer.

-
-
-

PART V: Evaluation

Describe when and how your work will be evaluated by your supervisor. Additionally, near the end of your internship, your advisor will email your supervisor an online performance appraisal form to be completed regarding your work.

PART VI: Agreement

This is a working agreement and does not constitute a contractual obligation. This agreement may be terminated or amended by the student, advisor or supervisor upon written notice.

Student Signature: _____ Date: _____

Advisor Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

(Copies of this signed agreement should be distributed to the student, advisor, and supervisor.)

Appendix D: IAA Intern Performance Appraisal Form

Q1 An internship is a learning opportunity for students at the Institute of Applied Agriculture (IAA), and students receive grades for their performance. Please use this form to help the academic advisor evaluate your intern. While the academic advisor will not share your direct comments with students, s/he will use your feedback to help prepare students for success in their careers. Thank you for your valuable feedback!

Q2 Please provide the following information about the student (i.e., your intern):

- Student Name (1) _____
 - Student Job Title (2) _____
 - Student Dates of Employment (3) _____
-

Q3 Please provide the following information about your organization:

- Organization Name (1) _____
 - Organization Address (2) _____
 - Organization Type (3) _____
-

Q4 Please provide the following information about yourself:

- Supervisor Name (1) _____
- Supervisor Email Address (2) _____
- Supervisor Phone Number (3) _____

Q5 Please check the appropriate responses below:

	Excellent (1)	Good (2)	Average (3)	Poor (4)	Terrible (5)
Attendance (punctuality) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quantity of Work (productivity, promptness) (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Quality of Work (accuracy, completeness) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Initiative (self-starter, resourceful) (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dependability (thorough, organized) (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Attitude (enthusiasm, curiosity, desire to learn) (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Interpersonal Relations (cooperative, courteous) (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ability to Learn (comprehension of new concepts) (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of Academic Training (applies education to practice) (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communications Skills (written and oral expression) (10)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Judgment (quality of decision-making) (11)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 Overall, how would you rate the performance of this student during the internship?

- Excellent (1)
- Good (2)
- Average (3)
- Poor (4)
- Terrible (5)

Q7 In what areas does the student excel?

Q8 In what areas does the student need to improve?

Q9 Did the student demonstrate continued progress throughout the internship? Please explain.

Q10 Was the student's academic preparation sufficient for this internship? Please explain.

Q11 Please add any additional comments or suggestions you have.

Q12 Would you consider having another intern from the Institute of Applied Agriculture (IAA)?

Yes (1)

No (2)

Q13 May we add your contact information to our database so future Institute of Applied Agriculture students can reach out to you regarding an internship?

Yes (1)

No (2)